UNIVERSITI TEKNOLOGI MARA

MODELING THE SEQUENTIAL AND SEQUENTIALLY MEDIATED INFLUENCE OF PSYCHOLOGICAL FACTORS ON ORAL PRESENTATION COMPETENCE AMONG MALAYSIAN UNDERGRADUATES

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NADIA BINTI ANUAR

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of the requirements for the degree of
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(Applied Language Studies)

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CONFIRMATION BY PANEL OF EXAMINERS

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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ABSTRACT

Oral presentation competence is increasingly recognised as a critical skill for university students, shaping both their academic performance and future employability. However, many undergraduates continue to face difficulties in developing this competence, and limited research has examined how psychological factors collectively influence oral presentation competence in higher education. Guided by Self-Determination Theory, this study investigated the sequential and sequentially mediated influence of perceived autonomy support, feedback literacy, grit, and intrinsic motivation on Malaysian undergraduates' oral presentation competence, as well as the mediating roles of feedback literacy, grit, and intrinsic motivation. A quantitative cross-sectional survey was conducted with 383 undergraduates at Universiti Teknologi MARA (UiTM) Selangor, selected through two-stage probability sampling. A questionnaire was developed and validated based on the literature and preliminary qualitative findings, and the data were analysed using factor analyses and structural equation modelling. The findings revealed that perceived autonomy support positively influenced students' feedback literacy, which subsequently strengthened grit, intrinsic motivation, and ultimately oral presentation competence. Furthermore, feedback literacy fully mediated the relationship between perceived autonomy support and grit, grit partially mediated the relationship between feedback literacy and intrinsic motivation, while intrinsic motivation fully mediated the relationship between grit and oral presentation competence. These findings extend the application of Self-Determination Theory by explaining how autonomy-supportive learning environments cultivate oral presentation competence through feedback literacy, grit, and intrinsic motivation. They also extend the application of the Oral Presentation-Multimodal Model by situating oral presentation competence within a validated psychological explanatory framework. The study culminated in the development of the COMPASS Model and the Oral Presentation Competence Inventory (OPCI). The COMPASS Model advances understanding of how psychological factors interact to influence oral presentation competence, while the OPCI provides educators and researchers with a validated instrument to assess and enhance students' oral presentation competence in higher education.

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LIST OF ABBREVIATIONS

Abbreviations

AIMS	Academic Information Management System
AMOS	Analysis of Moment Structures
AVE	Average Variance Extracted
CB-SEM	Covariance-Based Structural Equation Modeling
CFA	Confirmatory Factor Analysis
CMV	Common Method Variance
CR	Composite Reliability
CVI	Content Validity Index
EFA	Exploratory Factor Analysis
FBL	Feedback Literacy
GFI	Goodness of Fit Index
GRT	Grit
IFI	Incremental Fit Index
IMT	Intrinsic Motivation
KMO	Kaiser-Meyer-Olkin Measure of Sampling Adequacy
MD	Mahalanobis Distance
MI	Modification Indices
MVA	Missing Value Analysis
OPC	Oral Presentation Competence

OPCI	Oral Presentation Competence Inventory
OPMM	Oral Presentation-Multimodal Framework
PAS	Perceived Autonomy Support
PCA	Principal Component Analysis
RMSEA	Root Square Error of Approximation
SDT	Self-Determination Theory
SIMS	Student Information Management System
SPSS	Statistical Package for Social Sciences
SEM	Structural Equation Modeling
TLI	Tucker-Lewis Index
UiTM	Universiti Teknologi MARA
VB-SEM	Variance-based Structural Equation Modeling
WTC	Willingness to Communicate

CHAPTER 1
INTRODUCTION

1.1 Introduction

Oral presentation competence is a key skill for academic and professional success because it allows individuals to share ideas clearly and confidently. Despite its importance, many students continue to struggle with delivering effective presentations. Recognising this issue, this study investigates the factors influencing university students' oral presentation competence, focusing on four psychological constructs which are perceived autonomy support, grit, intrinsic motivation, and feedback literacy.

This chapter introduces the study by presenting the background of the study, the specific problems addressed, and the objectives and questions guiding the investigation. In addition to framing this study, this chapter highlights the significance of this study. The scope and operational definition of the key terms in this study are also presented in this chapter to ensure clarity and focus. The organisation of the thesis is then presented to provide an overview of its structure. The chapter ends with a short summary.

1.2 Background of the Study

Rapid globalisation and digital transformation have fundamentally reshaped labour market expectations, transforming the competencies required for graduate employability (Al-Maskari et al., 2024; Orr et al., 2023). In today's knowledge-driven economy, employers no longer seek graduates solely based on technical expertise. Instead, they increasingly value transferable competencies that enable graduates to communicate effectively, collaborate with diverse stakeholders, adapt to changing work environments, and solve complex problems (Alves et al., 2023; Nair et al., 2024). Consequently, communication and other transferable competencies are no longer viewed as complementary to technical knowledge but have become essential attributes for sustaining employability in dynamic and technology-driven workplaces.

The rapid adoption of artificial intelligence (AI) has further accelerated this shift by automating routine and predictable tasks while increasing demand for uniquely human capabilities that are difficult to replicate through technology. Although AI has

enhanced organisational productivity and operational efficiency, it has also contributed to workforce displacement, particularly in occupations involving repetitive technical tasks (Tyson & Zysman, 2022). As a result, employers are increasingly adopting skill-based hiring practices in which demonstrable competencies often complement, and in some cases outweigh, formal academic qualifications (Ahmad Kamil et al., 2026; Bone et al., 2024). Consequently, communication has become one of the most valued competencies in current workplaces as a means of exchanging information and as a critical capability that enables graduates to work effectively alongside rapidly advancing technologies.

This growing emphasis on communication is consistently reflected across international, regional, and national higher education agendas. Regionally, the ASEAN Qualifications Reference Framework (AQRF) identifies communication, adaptability, and transferable skills as key competencies for enhancing graduate mobility and employability across ASEAN member states (Fahmi et al., 2019). Likewise, the Education 5.0 paradigm advocates the development of human-centred competencies that complement technological advancement and prepare graduates for increasingly complex professional environments (Firescu, 2025). In Malaysia, the Malaysian Education Blueprint (Higher Education) 2015-2025 continues to position communication, particularly oral communication, as a core graduate attribute that supports workforce readiness (Jamaludin, 2019; Teng et al., 2019). Collectively, these developments demonstrate that communication has become a strategic graduate competency across policy and industry contexts.

Among the various forms of oral communication, oral presentation competence represents a particularly high-stakes and evaluative skill. It requires students to articulate ideas clearly, organise information logically, communicate confidently, engage audiences effectively, and respond appropriately to audience feedback within high-pressure evaluative contexts (Tsang, 2020). In both academic and professional contexts, oral presentation performance is closely associated with leadership potential, professionalism, and career readiness (Tun et al., 2023). Although rarely specified in job advertisements, oral presentation competence is indispensable for translating technical knowledge into accessible terms, persuading stakeholders, and presenting data visually (Coffelt et al., 2024; Marcel, 2017).

Research consistently demonstrates that oral presentation competence is associated with positive workplace outcomes. Internationally, effective presentation

performance has been linked to employability, interview success, and client-facing effectiveness (Ortiz et al., 2016; Robles, 2012). Similarly, Malaysian employers report that graduates with strong oral presentation competence are more likely to be hired, retained, and promoted (Zainuddin et al., 2019). Despite its recognised importance, however, oral presentation competence remains one of the most challenging competencies for university students to develop (Al-khresheh, 2024), suggesting a persistent gap between workplace expectations and graduate preparedness.

This mismatch is further compounded by the limited opportunities available within higher education for students to develop oral presentation competence. Presentation training is frequently confined to standalone communication courses and is commonly assessed as a final product rather than developed progressively through repeated practice, meaningful feedback, and authentic disciplinary tasks (Barrett et al., 2021; Barrett & Liu, 2016; Lin, 2024; Tsang, 2020). This limitation reflects broader concerns that higher education often prioritises theoretical knowledge over authentic workplace communication, thereby contributing to the persistent gap between graduates' presentation competence and employers' expectations (Fan et al., 2021; Kocsis & Pusztai, 2025).

Beyond instructional limitations, growing evidence suggests that oral presentation competence is also shaped by students' psychological and behavioural readiness. Students frequently encounter psychological barriers such as fear of evaluation and performance anxiety, alongside behavioural challenges including limited non-verbal control and speech disfluencies, which can undermine presentation performance (Deby et al., 2023; Ding et al., 2024; Grieve et al., 2021; Sapuan et al., 2025). These findings suggest that students' oral presentation competence is not fully explained by instructional opportunities or observable presentation behaviours. Rather, understanding how students develop oral presentation competence requires a theoretical perspective that explains the psychological processes underlying learning and motivation. Among the theories explaining students' motivation and competence development, Self-Determination Theory (SDT) (Ryan & Deci, 2000) proposes that supportive learning environments facilitate competence development by satisfying students' basic psychological needs and promoting autonomous motivation. However, existing research has largely examined these psychological influences independently, resulting in a fragmented understanding of how they interact to influence oral presentation competence. Consequently, investigating the psychological factors of oral

presentation competence may provide a more comprehensive understanding how this essential graduate competency develops and informs strategies to enhance students' preparedness for academic and professional communication.

1.3 Statement of the Problem

Oral presentation competence is widely recognised as an essential graduate competency that contributes to both academic success and professional readiness. In higher education, students are expected to articulate ideas clearly, organise arguments logically, engage audiences effectively, and deliver presentations with confidence (Lin, 2023). Mastery of these skills enables graduates to communicate professionally and meet the communication demands of the workplace (Kashinathan & Aziz, 2022; Salman et al., 2020; Werle & Byrd, 2022).

Despite the growing emphasis on communication as a critical graduate competency, studies across various industries continue to report a persistent mismatch between the communication skills expected by employers and those demonstrated by graduates upon entering the workforce. This mismatch reflects graduates' experiences of fear, uncertainty, and a lack of confidence when required to communicate in situations that involve public speaking, participating in meetings, or delivering formal presentations (Lim et al., 2025; Park et al., 2024; Singh, 2021). Beyond communication apprehension, evidence also indicates that many graduates struggle to express ideas clearly, organise information coherently, and communicate persuasively during oral tasks, limiting their ability to meet professional expectations (Payong & Pantaleon, 2025; Richardt et al., 2024). The persistence of these challenges suggests that many graduates continue to experience difficulties in developing the communication competence expected in professional settings, despite the considerable emphasis placed on communication within higher education.

The communication gap is particularly evident in oral presentation competence. Despite completing various English language proficiency courses throughout their undergraduate studies, many students continue to demonstrate weaknesses in oral presentation performance (Kaur et al., 2024; Soomro et al., 2019). Reports indicate that approximately 60,000 graduates remained unemployed due, in part, to inadequate oral communication competence (Krishnan et al., 2024). Common weaknesses include poor fluency, inaccurate pronunciation, and ineffective language use, all of which reduce the

clarity and effectiveness of presentations (Rahman et al., 2019; Sahan et al., 2022). These findings suggest that oral presentation competence remains a persistent challenge that extends beyond higher education into the workplace.

Although language use and delivery skills are important in oral presentations, a growing body of research suggests that oral presentation competence is influenced not only by linguistic ability but also by psychological processes. Across contexts, students often report psychological barriers such as fear of negative evaluation, nervousness, stage fright, and low confidence, which undermine their ability to deliver presentations effectively (Amelia, 2022; Keo et al., 2025). At the same time, studies show that motivational beliefs and self-efficacy can strengthen students' willingness to present and improve the quality of their delivery (Hendrawan et al., 2025; Richardson et al., 2012; Tsang, 2020; Wu & Rose, 2025). Other research extends this by demonstrating that co-regulation strategies and autonomy-supportive environments further promote students' confidence, motivation, and engagement in oral tasks (Hao & Ke, 2024; Wang et al., 2024). Collectively, these studies underscore that psychological readiness is a critical dimension of oral presentation performance.

Despite the increasing number of studies examining psychological factors in relation to oral presentation performance, the existing literature shows two major limitations. First, many studies have focused on psychological influences in broader areas such as academic performance (e.g. Alverson et al., 2024; Carmona-Halty et al., Rožman et al., 2025), teaching and learning (e.g. Al-Nuaimi & Al-Emran, 2021; Khafshoh et al., 2023; Wang et al., 2021), and oral communication more broadly (e.g. Chang et al., 2024; Khajavy et al., 2018; Kim & Hwang, 2024; Sari, 2022). Second, while a small number of studies have examined psychological influences on oral presentations (Liang & Kelsen, 2018; Rahmadani et al., 2024; Wu & Rose, 2025), these studies have typically focused on single factors instead of considering how multiple factors interact. As a result, little is known about how psychological factors operate collectively to influence oral presentation competence in higher education.

Existing studies have demonstrated empirical relationships among several of the psychological factors examined in the present study. For example, perceived autonomy support has been examined alongside grit and intrinsic motivation (Hernandez et al., 2020; Lozano-Jiménez et al., 2024), while feedback literacy has been linked to autonomy support and intrinsic motivation (Zhang et al., 2024), and grit has been associated with feedback-related behaviours (Luan & Quan, 2025). However, these

relationships have largely been investigated separately, with few studies integrating perceived autonomy support, feedback literacy, grit, and intrinsic motivation within a single explanatory model. Consequently, how these psychological factors collectively contribute to oral presentation competence remains insufficiently understood.

Building on this issue, guided by Self-Determination Theory (Ryan & Deci, 2000), this study aims to examine the influence of four psychological factors, namely perceived autonomy support, feedback literacy, grit, and intrinsic motivation, on undergraduates' oral presentation competence. Together, these constructs represent complementary psychological processes related to the learning environment, students' engagement with feedback, perseverance when facing presentation challenges, and autonomous motivation towards learning. Examining these constructs within a single integrated model provides a more comprehensive understanding of how psychological processes interact to influence oral presentation competence. In doing so, the study proposes and validates an integrated psychological model of oral presentation competence, thereby contributing to a more comprehensive understanding of how this competency develops among Malaysian undergraduates.

1.4 Research Questions

This study primarily seeks to examine the psychological factors influencing Malaysian university students' oral presentation competence by investigating the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. In addition, the study examines the mediating roles of feedback literacy, grit, and intrinsic motivation within the proposed sequential model.

To achieve these aims, this study is guided by two overarching research question. The first research question examines the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence.

Research Question 1	:	How do perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence relate sequentially within the proposed model?

To address the first research question, the following four specific research questions are proposed.

Research Question 1.1	:	To what extent does perceived autonomy support influence feedback literacy?
Research Question 1.2	:	To what extent does feedback literacy influence grit?
Research Question 1.3	:	To what extent does grit influence intrinsic motivation?
Research Question 1.4	:	To what extent does intrinsic motivation influence oral presentation competence?

The second overarching research question examines the mediating roles of feedback literacy, grit, and intrinsic motivation within the proposed model.

Research Question 2	:	How do feedback literacy, grit, and intrinsic motivation mediate the sequential relationships among the psychological factors in the proposed model?

To answer the second research question, three specific research questions are formulated.

Research Question 2.1	:	To what extent does feedback literacy mediate the relationship between perceived autonomy support and grit?

Research Question 2.2	:	To what extent does grit mediate the relationship between feedback literacy and intrinsic motivation?
Research Question 2.3	:	To what extent does intrinsic motivation mediate the relationship between grit and oral presentation competence?

1.5 Research Objectives

This study primarily seeks to examine the psychological factors influencing Malaysian university students' oral presentation competence by investigating the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation and oral presentation competence. Additionally, this study examines the mediating roles of feedback literacy, grit, and intrinsic motivation within the proposed sequential model.

To achieve these aims, this study is guided by two overarching research objectives. The first overarching research objective examines the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence.

Research Objective 1	:	To examine the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence.

To achieve this research objective, the following specific research objectives are proposed:

Research Objective 1.1	:	To examine the influence of perceived autonomy support on feedback literacy.
Research Objective 1.2	:	To examine the influence of feedback literacy on grit.

Research Objective 1.3	:	To examine the influence of grit on intrinsic motivation.
Research Objective 1.4	:	To examine the influence of intrinsic motivation on oral presentation competence.

The second overarching research objective examines the mediating roles of feedback literacy, grit, and intrinsic motivation within the proposed sequential model.

Research Objective 2	:	To examine the mediating roles of feedback literacy, grit, and intrinsic motivation in the sequential relationships among the proposed psychological factors.

To achieve this research objective, the following specific research objectives are proposed:

Research Objective 2.1	:	To assess the mediating role of feedback literacy in the relationship between perceived autonomy support and grit.
Research Objective 2.2	:	To assess the mediating role of grit in the relationship between feedback literacy and intrinsic motivation.
Research Objective 2.3	:	To assess the mediating role in intrinsic motivation on the relationship between grit and oral presentation competence.

1.6 Research Hypotheses

This study intends to examine the psychological factors influencing Malaysian university students' oral presentation competence by investigating the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. Based on the research objectives and

research questions presented in the preceding sections, seven research hypotheses are proposed.

The first research objective examines the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. Accordingly, four hypotheses are formulated to examine these sequential relationships.

Hypothesis 1	:	Perceived autonomy support positively influences feedback literacy.
Hypothesis 2	:	Feedback literacy positively influences grit.
Hypothesis 3	:	Grit positively influences intrinsic motivation.
Hypothesis 4	:	Intrinsic motivation positively influences oral presentation competence.

The second research objective examines the mediating roles of feedback literacy, grit, and intrinsic motivation within the proposed model. Accordingly, three hypotheses are formulated to examine these mediation relationships.

Hypothesis 5	:	Feedback literacy mediates the relationship between perceived autonomy support and grit.
Hypothesis 6	:	Grit mediates the relationship between feedback literacy and intrinsic motivation.
Hypothesis 7	:	Intrinsic motivation mediates the relationship between grit and oral presentation competence.

1.7 Significance of the Study

The present research investigates the relationships among perceived autonomy support, feedback literacy, grit and oral presentation competence among Malaysian undergraduates, and in doing so, it contributes to theory, methodology and practice.

Theoretically, this study extends the application of self-determination theory by examining how autonomy support, feedback literacy, grit, and intrinsic motivation sequentially influence oral presentation competence. It also empirically applies the Oral Presentation-Multimodal Competence (OPMM) framework in a new context. By testing both direct and indirect effects, this study provides new insights into the mediated influence of feedback literacy, grit, and intrinsic motivation, thus advancing understanding of the psychological processes that drive competence in high-stakes communication tasks.

Methodologically, the study contributes through the development and validation of the Oral Presentation Competence Inventory (OPCI), which provides a reliable and comprehensive tool for future research. The use of two-stage probability sampling and structural equation modelling further strengthens the robustness of the findings, demonstrating an approach that can be replicated in similar higher education contexts. These methodological advances ensure that the study is not only contextually relevant but also capable of informing wider empirical investigations into oral presentation competence.

Practically, the results are of importance for students, educators, curriculum designers, and industry practitioners. For educators, this study provides insights into the complex psychological processes that shape students' oral presentation competence. Examining both the sequential and mediated influence of perceived autonomy support, feedback literacy, grit, and intrinsic motivation is important for understanding how these constructs influence students' internal state during presentations. For instance, supportive teaching can encourage students to take risks in speaking tasks, while strong feedback literacy allows them to interpret and act on evaluative input in ways that improve performance. Persistence and authentic motivation, in turn, help students sustain preparation and overcome anxiety during delivery. Much of the existing teaching in classrooms still emphasises language proficiency and content preparation while overlooking these internal dynamics. By shedding light on these processes, the study enables educators to design learning environments that build not only linguistic accuracy but also the psychological readiness required for effective oral performance (Gaspar, 2025; Lu, 2025).

For both educators and students, the study offers a model that clarifies how students view oral presentation tasks and what support they require. With these insights, instructors can tailor their feedback and teaching strategies to the specific needs of

individual learners. This targeted approach can foster stronger feedback literacy among both instructors and students, ensuring that feedback is not only delivered effectively but also understood and acted upon (Carless, 2020; Xu & Carless, 2017). Guided practice and constructive feedback can encourage students to approach oral presentations with greater confidence and engagement, transforming them from high-anxiety tasks into learning opportunities. For students, the findings highlight the common barriers that hinder performance and show how psychological readiness interacts with linguistic and technical skills. Recognising these challenges can help them build self-awareness and adopt strategies to refine their ability to structure, articulate, and deliver their ideas effectively.

For curriculum reviewers and designers, the study draws attention to the list of oral presentation competencies among audience engagement, content mastery and delivery which are essential in both classroom contexts and the professional job market. The hypothesis testing and instrument validation processes provide empirical evidence of which competencies are important, offering a clearer framework for curriculum planning. This is particularly relevant in a volatile job market where communication competence continues to be prioritised by employers as a core graduate attribute. Identifying these competencies helps curriculum reviewers ensure that programme structures remain responsive to market needs and educational policies. At the same time, the findings can encourage curriculum designers to create more opportunities for iterative practice, personalised feedback, and discipline-specific presentation tasks, thereby making oral presentation training more relevant and practical (Brooks & Wilson, 2015; Koseda et al., 2024; Milton & Prabakaran, 2020; Misni et al., 2020; Rachman et al., 2023).

For industry practitioners, this study highlights how psychological factors such as feedback literacy, grit, and intrinsic motivation shape oral presentation competence, which is increasingly recognised as a core employability skill across sectors such as consulting, sales, education, and customer service. The validated Oral Presentation Competence Inventory (OPCI) emerging from this research can be applied by employers and training managers as a tool to screen candidates, coach interns, and evaluate employees engaged in client-facing or high-stakes communication tasks. Its emphasis on transferable traits such as adaptability and motivation reflects current labour market expectations for professionals who can communicate persuasively and confidently in multicultural and fast-paced environments. By foregrounding these

psychological underpinnings, the study bridges academic and professional domains, enabling employers to design targeted training and talent development initiatives that produce graduates ready to thrive in competitive workplaces.

1.8 Scope of the Study

This study focuses on examining the structural relationships between selected psychological factors and oral presentation competence among Malaysian undergraduates. Although numerous psychological factors have been associated with learning and communication outcomes, this study narrows its scope to four constructs that align with Self-Determination Theory (SDT), namely perceived autonomy support, feedback literacy, grit, and intrinsic motivation. The proposed model examines the sequential and mediated influence of psychological factors on oral presentation competence through a series of hypothesised relationships.

This research adopts a quantitative, cross-sectional design to investigate the relationships among the four constructs and oral presentation competence. In this design, data are elicited from undergraduates individually using a questionnaire. Adhering to the cross-sectional nature, the data were collected at a single point in time. This approach is considered suitable for the objectives of the study, which aim to identify relationships between psychological factors and oral presentation competence, rather than to examine changes over time. Examining longitudinal change is beyond the scope of this research. The study also did not measure live presentation performance directly, relying instead on self-report instruments, which defines another boundary of its scope.

To facilitate this analysis, a sampling frame was developed. The sampling frame comprises undergraduates from three academic programme clusters, namely science and technology, social sciences and humanities, and business and management at a single public university, Universiti Teknologi MARA (UiTM) Selangor Campus for the 2023 and 2024 academic years. The Selangor Campus consists of four branches: Shah Alam, Puncak Alam, Puncak Perdana, and Sungai Buloh. The undergraduates for the sampling frame were drawn from four English proficiency courses: English for Oral Presentations (ELC590), English for Informative Speech (LCC400), English for Oral Reporting (LCC402), and English for Persuasion (LCC600). These courses were selected because of their strong emphasis on oral presentations which constitute over 70% of the course assessments. This criterion ensured alignment with the study's focus on oral presentation competence.

It is important to clarify that this study focuses on oral presentation competence holistically, rather than on undergraduates' general language proficiency. This decision

is informed by scholars such as Cox et al. (2022), who note that fluency alone is insufficient to measure competence. Instead, this study operationalises oral presentation competence using Radzuan et al. (2023)'s Oral Presentation Multimodal Framework, which defines oral presentation competence as comprising knowledge, skills, and attitude. Extending these, the three aspects are further detailed as presentation content (knowledge), multimodal competence (skills), and professionalism (attitude). This framework was selected to operationalise oral presentation competence because it was developed specifically for oral presentation competence measurement and contextualised within the Malaysian higher education context. Further discussion on the operationalisation of oral presentation competence is provided in Chapter 2, while the scale for this construct is presented in Chapter 5.

As this scope ensures a focused investigation of oral presentation competence, the next section outlines the operational definitions of the key constructs examined in this research.

1.9 Operational Definition of Key Terms

This section, divided into two subsections, presents the operational definitions of the key constructs examined to ensure conceptual clarity and consistency throughout the study. The first subsection defines the key terms while the second subsection introduces the terms that were used to label subconstructs that emerged from the exploratory factor analysis (EFA). Together, these operational definitions guide the subsequent chapters.

1.9.1 Feedback Literacy

Feedback literacy is a comprehensive capability that enables individuals to understand, seek, use and provide feedback effectively, while also managing emotional responses and making evaluative judgements to support learning (Carless & Winstone, 2020; Dawson et al., 2024; Nieminen & Carless, 2023; Weidlich et al., 2025). In this study, feedback literacy is operationalised as students' ability to interpret and utilise feedback information to improve their competence in oral presentations

1.9.2 Grit

Grit is defined as a personality trait marked by sustained passion and perseverance in pursuit of long-term goals, despite challenges, failures or slow progress (Credé et al., 2017; DiNapoli, 2023; Duckworth et al., 2007). In this study, grit is operationalised as students' persistent and self-driven efforts to enhance their oral presentation competence over time, demonstrated by their willingness to engage in challenging presentation tasks, practise consistently, and remain motivated in the face of presentation-related difficulties.

1.9.3 Intrinsic Motivation

Intrinsic motivation refers to the motivation to engage in an activity for the inherent enjoyment, interest, or satisfaction it proves, rather than for external rewards or pressures (Herlambang et al., 2021; Karimi & Sotoodeh, 2020; Ryan & Deci, 2000). In this study, intrinsic motivation is operationalised as students' internal drive to participate in oral presentations out of enjoyment, interest, and a sense of personal fulfilment (Hennessey et al., 2014).

1.9.4 Oral Presentation Competence

Competence refers to the integration of knowledge, skills, judgement, and experience that enables individuals to perform a role or task effectively (Cornock, 2011; Salman et al., 2020). Within presentation research, presenting is frequently defined as "*a combination of knowledge, skills, and attitudes needed to speak in public in order to inform, self-express, to relate and to persuade*" (De Grez, 2009, p. 5). Extending this definition, van Ginkel et al. (2015a, 2015b, 2019) describes oral presentation competence as the ability to communicate ideas and information effectively in academic, professional, or public settings.

Adapting these perspectives, this study operationalises oral presentation competence as the ability to demonstrate content mastery, engage the audience, and apply effective delivery skills to present in a structured, engaging, and contextually appropriate manner in academic and professional contexts.

1.9.5 Perceived Autonomy Support

Perceived autonomy support refers to the extent to which individuals perceive that significant others such as teachers, coaches, or supervisors in supporting their sense of volition, self-initiation, and meaningful participation in decision-making processes (Browne et al., 2017; Chatzisarantis et al., 2007; Hagger et al., 2015). In this study, perceived autonomy support is operationalised as the extent to which students feel they have the freedom to make choices about the content and delivery of their oral presentations, express their ideas openly, and receive respectful encouragement from their lecturers.

1.9.6 Psychological Factors

Psychological factors refer to internal and non-cognitive factors that contribute to students' learning experiences and performance (Richardson et al., 2012; Zhou & Brown, 2015). In this study, psychological factors refer to perceived autonomy support, feedback literacy, grit, and intrinsic motivation for oral presentation competence.

1.9.7 Undergraduates

In this study, undergraduates refer to individuals who are currently enrolled in one of the four targeted English language proficiency courses at Universiti Teknologi MARA (UiTM) Selangor campus.

1.10 Organisation of the Thesis

This thesis is organised into five chapters, each addressing a critical aspect of the research process to comprehensively examine the psychological factors influencing oral presentation competence among Malaysian undergraduates.

Chapter 1 introduces the study by contextualising the research problem and establishing its rationale. The chapter begins with an overview of the study, followed by a discussion of the research background, which highlights the importance of oral communication and presentation competence in higher education. The problem statement identifies key challenges and research gaps that justify the need for the present

study. The chapter also presents the research objectives and questions, outlines the significance and scope of the study, and provides operational definitions of key terms. It concludes with an overview of the thesis structure and a chapter summary.

Chapter 2 presents the literature review, theoretical framework, conceptual framework, and hypotheses development. The chapter reviews relevant literature on oral presentation competence, perceived autonomy support, feedback literacy, grit, and intrinsic motivation. It further examines how these constructs have been investigated within oral communication and educational contexts. The chapter then discusses the theoretical foundations underpinning the study and presents the conceptual framework. Drawing upon the reviewed literature and theoretical perspectives, seven hypotheses are developed to examine the sequential and mediated relationships among the study variables.

Chapter 3 describes the research methodology, instrument development, and validation procedures. The chapter begins by outlining the research paradigm, research design, unit of analysis, sampling procedures, and sample size determination. It then presents the preliminary investigations, including interviews with hiring managers and an exploratory survey with undergraduates, which informed the development of the research instrument. The chapter further discusses the instrument adaptation process, expert review, pretesting procedures, exploratory factor analysis (EFA), reliability analysis, data collection procedures, data screening, and inter-rater agreement analysis. The chapter concludes with a description of the final instrument employed in the fieldwork phase.

Chapter 4 presents the findings of the study. The chapter begins with descriptive statistics of the study variables, followed by the assessment of the measurement model using confirmatory factor analysis (CFA). Subsequently, a pooled CFA is conducted to validate the COMPASS model. The chapter concludes with structural equation modelling (SEM), which evaluates the sequential and mediated relationships among the constructs and tests all proposed hypotheses.

Chapter 5 summarises the key findings and discusses them in relation to existing theories and empirical studies. The chapter highlights the theoretical, methodological, and practical contributions of the study. It also acknowledges the limitations of the research and offers recommendations for future research and practice. The thesis concludes with a summary of the study's overall contributions and implications.

1.11 Chapter Summary

This chapter has established the basis for the study by introducing the context, rationale, and scope of the research. It began with the background of the study, which discusses the broader importance of oral communication, and gradually narrowed its focus to oral presentation skills. The problem statement outlines key challenges learners face in delivering oral presentations, particularly in relation to psychological factors. Based on these issues, the chapter presented the research objectives and questions that guide this investigation.

In addition, this chapter discussed the theoretical and practical significance of the study, explaining how the findings may contribute to both academic understanding and real-life settings. The scope of the study was also outlined to clarify the boundaries of the study. Next, the operational definitions of key terms and emergent terms from factor analysis were presented. Lastly, the chapter presented an overview of the overall thesis structure. The next chapter reviews relevant literature and empirical studies, leading to the development of the conceptual and theoretical framework that underpins this study.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature and theoretical foundations underpinning the present study. It begins by discussing communicative competence models and oral presentation competence, followed by the integration of the Oral Presentation-Multimodal Framework and Self-Determination Theory as the theoretical basis of the study. Guided by these theoretical perspectives, the literature on perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence is then reviewed to develop the proposed sequential and mediated hypotheses. The chapter concludes with a synthesis of previous empirical studies through a systematic literature review, the identification of research gaps, and the presentation of the proposed conceptual framework before summarising the chapter.

2.2 Communicative Competence

Communicative competence refers to an individual's ability to communicate effectively and appropriately by selecting and adapting linguistic and non-linguistic resources according to the demands of a particular communicative context (Bachman, 1990; Canale & Swain, 1980; Hymes, 1972). Communicatively competent individuals can convey intended meanings, negotiate interactions, and achieve communicative goals while considering the audience, purpose, and sociocultural context in which communication occurs (Bachman, 1990; Canale & Swain, 1980). Consequently, communicative competence extends beyond linguistic accuracy to encompass the ability to use language meaningfully, appropriately, and strategically across diverse communicative situations (Bachman, 1990; Mootoosamy & Aryadoust, 2024).

The emergence of communicative competence marked a significant shift in how language proficiency was conceptualised. Earlier linguistic perspectives, particularly Chomsky's (1965) notion of linguistic competence, viewed language proficiency primarily as speakers' knowledge of grammatical rules. While this perspective explained how language is structured, it offered limited explanation of how language is

successfully used in authentic social interaction. Responding to this limitation, Hymes (1972) argued that effective communication depends not only on grammatical knowledge but also on speakers' understanding of when, where, why, and how language should be used appropriately within specific social and cultural contexts. This reconceptualisation fundamentally shifted language education from viewing communication as linguistic accuracy to understanding it as socially situated language use.

Subsequent theoretical developments progressively refined this conceptualisation. Canale and Swain (1980), followed by Canale (1983), proposed that effective communication requires the integration of grammatical, sociolinguistic, discourse, and strategic competences. Bachman (1990) later expanded this perspective by distinguishing organisational competence from pragmatic competence, emphasising speakers' ability to organise discourse and use language functionally according to communicative purposes. Although these frameworks differ in their conceptual organisation, emphasis, and terminology, they collectively reflect a progressive shift from viewing communication as linguistic knowledge to conceptualising it as a multidimensional capability requiring the integration of linguistic, sociocultural, discourse, and strategic resources. Collectively, these developments established communicative competence as a broad construct that extends beyond language proficiency to encompass the knowledge, skills, and strategies required for effective communication across diverse communicative contexts (Canale & Swain, 1980).

Despite more than five decades of theoretical development, communicative competence remains both dynamic and conceptually expansive. Rather than converging towards a single universally accepted framework, contemporary scholarship continues to refine and extend the construct in response to changing educational, technological, and societal demands. Mootoosamy and Aryadoust (2024), in their systematic review of 85 empirical studies, concluded that communicative competence has undergone continual conceptual evolution, with no universal consensus regarding its definition or operationalisation. Their review further demonstrated that recent conceptualisations have expanded beyond traditional linguistic perspectives to encompass intercultural and multimodal communicative competence, reflecting the increasingly complex communication demands associated with globalisation, multilingualism, and digital communication. Similarly, Feng et al. (2025) demonstrated that specialised forms of communicative competence increasingly incorporate psychological attributes,

including motivation, empathy, and mindset, alongside linguistic competencies in explaining effective communication. Rather than signalling conceptual inconsistency, these continued refinements illustrate the responsiveness of communicative competence to evolving communicative contexts. Consequently, communicative competence is more appropriately understood as a dynamic and multidimensional framework than as a fixed set of communicative skills.

The continued evolution of communicative competence reflects broader changes in the expectations placed upon graduates within higher education. Beyond acquiring disciplinary knowledge, university students are increasingly expected to communicate ideas clearly, collaborate effectively, participate in academic discussions, and demonstrate professionalism across diverse academic and workplace settings (Anuar et al., 2026). Consequently, communicative competence is now widely recognised as an essential graduate attribute because it enables students to communicate effectively with different audiences, adapt to diverse communicative situations, and construct meaning across increasingly multicultural and technologically mediated environments (Clokie & Fourie, 2016; Oliver & De St Jorre, 2018). Within the Malaysian context, Ahmad Kamil et al. (2026) similarly identified English professional communicative competence as a critical determinant of graduate employability, highlighting linguistic, sociolinguistic, discourse, and strategic competences as key workplace expectations reported by both employers and graduates. These findings reinforce that communicative competence should no longer be viewed merely as a language outcome but as an essential professional competency that underpins graduates' academic and career success.

Recent empirical evidence further suggests that communicative competence is shaped not only by linguistic knowledge but also by the quality of students' learning experiences. Coidno and Magday (2026) reported that authentic communicative practice, continuous formative feedback, supportive classroom interaction, and instructional quality play a more influential role in developing communicative competence than demographic characteristics. These findings reinforce the view that communicative competence develops through meaningful participation in supportive learning environments rather than through language exposure alone (Coidno & Magday, 2026). More importantly, they suggest that communication development cannot be adequately explained solely by linguistic competence but also requires consideration of the educational conditions and psychological processes that influence

how students engage with, persist in, and improve their communicative performance (Feng et al., 2025). This growing recognition of the interaction between learning environments and psychological processes provides an important foundation for examining the psychological mechanisms underlying communication development.

Although communicative competence provides the overarching theoretical foundation for understanding effective communication, its conceptual breadth limits its explanatory value for specific communicative performances. Different communicative activities impose distinct linguistic, cognitive, interpersonal, and contextual demands that cannot be fully explained through broad conceptualisations of communicative competence alone (Mootoosamy & Aryadoust, 2024). Consequently, greater conceptual specificity is required when examining complex academic performances such as oral presentations, where students must simultaneously organise ideas, engage audiences, adapt to situational demands, respond to feedback, and coordinate verbal and non-verbal communication within formal evaluative settings (Radzuan et al., 2023; Tsang, 2020). Examining oral presentation competence as a manifestation of communicative competence therefore provides a more contextually appropriate basis for understanding how psychological factors contribute to students' communication performance in higher education.

2.3 Oral Presentation Competence

Oral presentation competence (OPC) is widely recognised as a multidimensional construct that encompasses linguistic proficiency, communication skills, and the cognitive and affective capacities required for effective performance in academic and professional settings. Despite its recognised importance, the conceptualisation of OPC has evolved considerably over the past three decades. Earlier research largely viewed oral presentations as a collection of discrete communication skills that could be taught and assessed independently. More recent scholarship, however, increasingly conceptualises OPC as a multidimensional competence that integrates knowledge, behaviours, attitudes, and contextual judgement. This conceptual evolution is important because the way oral presentation competence is defined determines how it is assessed, developed, and investigated within educational research.

The conceptualisation of oral presentation competence has gradually shifted from viewing presentations as collections of isolated communication skills towards

recognising competence as an integrated capability that combines cognitive, behavioural, and affective dimensions. This shift reflects broader developments within communication and educational research, where competence is increasingly understood as more than the successful execution of individual presentation techniques. Instead, competent presenters are expected to integrate disciplinary knowledge, communication skills, professional behaviours, and contextual judgement to communicate effectively across diverse presentation settings.

A key distinction underpinning this conceptual evolution lies between skills and competence. Although these terms are often used interchangeably within the literature, they represent different levels of performance. Skills refer to discrete procedural abilities, such as modulating voice, maintaining eye contact, structuring presentation slides, or pronouncing words accurately, which can be taught, practised, and assessed independently. Competence, in contrast, represents a broader capability that integrates knowledge, skills, attitudes, values, and contextual judgement into meaningful performance (Canale & Swain, 1980; Coffelt & Smith, 2020; Dara et al., 2024; Shah, 2024; Ten Cate, 2022).

This distinction is particularly important within oral presentation contexts. A student may demonstrate accurate pronunciation or effective slide design yet still fail to communicate persuasively if unable to organise ideas coherently, respond to audience expectations, or adapt delivery to different communicative situations. As Ten Cate (2022) argues, competencies are not directly observable attributes but become evident only through authentic performance. Similarly, Shah (2024) contends that individual skills attain the status of competence only when consistently integrated with communication, professionalism, ethical judgement, and contextual awareness (Efremova, 2021). Accordingly, conceptualising oral presentation as a competence rather than merely a skill provides a more comprehensive understanding of presentation performance by acknowledging the interaction between technical abilities, cognitive processes, and affective dispositions.

Early empirical research reflected a predominantly skills-oriented understanding of oral presentations. For example, De Grez et al. (2009) developed a multimedia instructional intervention grounded in social cognitive theory to improve university students' presentation performance. Their findings demonstrated significant improvements in content-related aspects such as introductions and conclusions, whereas non-verbal delivery components, including eye contact and vocal projection, proved

more resistant to instructional intervention. Although these findings demonstrated that individual presentation skills could be enhanced through structured instruction, they also illustrated the limitations of treating oral presentation performance as a collection of discrete behaviours. Improving isolated presentation techniques does not necessarily translate into the development of oral presentation competence, which requires students to integrate multiple dimensions of performance within authentic communicative contexts.

Recognition of these limitations prompted researchers to adopt broader perspectives that situated oral presentation competence within its social and educational context. Morita (2000), for instance, examined oral academic presentations as processes of discourse socialisation rather than isolated performance events. Her eight-month ethnographic study demonstrated that competence develops through repeated cycles of preparation, observation, presentation, reflection, and interaction with peers and instructors. Both native and non-native English speakers actively negotiated classroom expectations while gradually developing competence through participation in academic communities. This perspective broadened the understanding of oral presentation competence by demonstrating that effective presentations are shaped not only by individual communication skills but also by the social, institutional, and cultural contexts within which presentations occur.

Building upon these perspectives, subsequent research increasingly conceptualised oral presentation competence as a multidimensional construct. Among the most influential contributions were the studies conducted by van Ginkel et al. (2015, 2017), who proposed that oral presentation competence comprises three interrelated dimensions: cognition, behaviour, and attitude. Their work demonstrated that authentic presentation practice, behaviour modelling, and structured feedback contributed to competence development, thereby moving beyond earlier skill-based conceptualisations. Nevertheless, although this multidimensional perspective represented an important conceptual advancement, its application within predominantly European educational contexts raises questions regarding its transferability to other higher education environments. Furthermore, its emphasis on teacher feedback provides relatively limited consideration of learner agency and the psychological processes that contribute to competence development.

Recent scholarship has continued to expand the conceptualisation of oral presentation competence by recognising its multimodal and socially situated nature. For

example, Rusu and Bozov (2024) proposed a comprehensive assessment framework incorporating linguistic accuracy, discourse organisation, sociolinguistic appropriateness, strategic competence, and academic communication. Their framework provides valuable guidance for evaluating oral presentations across multiple communication dimensions. However, it remains primarily oriented towards assessing observable presentation skills rather than conceptualising competence as an integrated capability encompassing cognitive, behavioural, and affective dimensions. Consequently, although recent frameworks have broadened the criteria used to assess oral presentations, conceptual ambiguity persists regarding how oral presentation competence should be comprehensively operationalised.

The literature reviewed thus far suggests that an appropriate conceptualisation of oral presentation competence should satisfy three important criteria. First, competence should extend beyond isolated presentation skills to reflect integrated performance. Second, it should encompass cognitive, behavioural, and affective dimensions of communication. Third, it should be sufficiently sensitive to the educational context in which competence is developed and assessed. Among the existing conceptualisations, the Oral Presentation-Multimodal (OP-MM) framework developed by Radzuan et al. (2023) comprehensively fulfils these requirements (as in .

The OP-MM framework conceptualises oral presentation competence through three interrelated dimensions: knowledge, skills, and attitude. Knowledge encompasses both contextual understanding and content quality, ensuring that presenters demonstrate mastery of the subject matter and organise information coherently. Skills include both linguistic and non-linguistic aspects of presentation delivery, reflecting the integration of verbal communication, visual support, and multimodal presentation techniques. Attitude incorporates professionalism, confidence, audience awareness, and effective time management, recognising that successful presentations depend not only on technical performance but also on appropriate professional conduct and communication dispositions.

Importantly, the OP-MM framework was developed within the Malaysian higher education context, enhancing its contextual relevance for the present study. By integrating cognitive, behavioural, and affective dimensions within a single framework, it provides a more holistic conceptualisation of oral presentation competence than earlier skill-oriented models. Accordingly, the present study adopts the OP-MM framework because it offers a comprehensive and contextually appropriate

conceptualisation of oral presentation competence that aligns with the objectives of this research.

Having established how oral presentation competence has evolved conceptually and justified the framework adopted in the present study, the discussion now turns to the empirical literature. Examining previous research provides insight into how oral presentation competence has been investigated across different educational contexts while identifying the theoretical and empirical developments that have shaped current understanding of this construct.

2.3.1 Empirical Perspectives on Oral Presentation Competence

Having conceptualised oral presentation competence (OPC), it is equally important to examine how the construct has been investigated empirically. Although OPC has attracted increasing scholarly attention over the past two decades, research has developed along multiple strands rather than a single coherent line of inquiry. Consequently, current understanding of oral presentation competence has been shaped by diverse perspectives that explain different aspects of presentation performance.

One of the earliest and most established strands of research seeks to explain why students struggle with oral presentations. This body of work demonstrates that presentation performance is constrained not by linguistic proficiency or psychological readiness alone, but by the interaction between both domains. This challenges earlier assumptions that improving language skills alone is sufficient for developing oral presentation competence and instead suggests that competence is shaped by multiple interrelated influences.

Evidence supporting this position has emerged consistently across different educational contexts. Hadi et al. (2019), for example, reported that undergraduate students experienced considerable difficulty with vocabulary, pronunciation, and comprehension of their research content during thesis presentations. Importantly, these linguistic difficulties were accompanied by anxiety and low confidence, indicating that communication challenges and psychological readiness interact to influence presentation performance. Similar conclusions were reached by Grieve et al. (2021), who found that fear of negative evaluation, uncertainty regarding presentation content, and physiological symptoms of anxiety substantially affected students' experiences of oral presentations within higher education.

Large-scale quantitative evidence further demonstrates that the relative influence of these factors may vary according to educational context. Waluyo and Lailatu (2021), in a study involving 390 Thai EFL students, reported that English proficiency was the only significant predictor of oral presentation performance, whereas self-confidence and teacher feedback showed no direct effects. Rather than contradicting earlier findings, this suggests that linguistic proficiency may dominate presentation performance within lower-proficiency contexts, while psychological factors become increasingly influential as students acquire sufficient language competence. Earlier studies similarly established the importance of affective variables, with Behnke and Sawyer (2000) demonstrating the detrimental influence of anticipatory anxiety on public speaking, and MacIntyre and Legatto (2011) highlighting willingness to communicate as an important precursor of successful oral interaction.

Recognising this difference, subsequent research shifted attention from identifying barriers towards examining instructional approaches capable of enhancing oral presentation competence. Consequently, pedagogical intervention has emerged as one of the most extensively investigated areas of OPC research, reflecting the assumption that competence can be strengthened through structured learning experiences. Early intervention studies demonstrated that instructional support improves presentation performance, although improvements appear uneven across different dimensions of competence. De Grez et al. (2009), for instance, found that multimedia-based instruction significantly improved students' organisation of presentation content, whereas non-verbal communication behaviours such as eye contact and vocal projection proved comparatively resistant to short-term intervention. These findings suggest that while certain presentation skills respond readily to instruction, more complex behavioural aspects of competence require sustained practice and reinforcement.

Building upon this work, researchers increasingly examined the role of assessment and feedback in supporting competence development. De Grez et al. (2012) demonstrated that structured peer assessment encouraged reflective learning and produced evaluations comparable to teacher judgements, whereas self-assessment proved less reliable. Subsequent studies further revealed that assessment effectiveness depends not only on instructional design but also on students' motivational and affective characteristics. Bolívar-Cruz and Verano-Tacoronte (2018), for example, found that students' self-assessments were influenced by gender-related motivational differences,

while van Ginkel et al. (2015) reported that teacher feedback consistently aligned more closely with high-quality assessment criteria than peer feedback unless appropriate scaffolding was provided.

More recent pedagogical research has continued to emphasise the importance of authentic learning environments. van Ginkel et al. (2019) demonstrated that virtual learning environments created valuable opportunities for repeated presentation practice, although teacher feedback remained the strongest influence on competence development. Similarly, Pérez-Torregrosa et al. (2022) illustrated how digital rubrics promoted greater transparency and dialogue within flipped and project-based learning environments. Earlier studies examining peer assessment likewise demonstrated that peer evaluations can closely approximate teacher judgements when supported by appropriate assessment criteria and training (Cheng & Warren, 2005; Langan et al., 2005; Magin & Helmore, 2001; Patri, 2002). Collectively, pedagogical research demonstrates that oral presentation competence can be enhanced through repeated practice, authentic assessment, and structured feedback. Nevertheless, students frequently respond differently to similar instructional experiences, suggesting that instructional design alone cannot fully explain competence development.

This observation encouraged researchers to move beyond instructional interventions towards understanding oral presentation competence as a socially situated phenomenon. Rather than conceptualising competence as an individual achievement, sociocultural perspectives recognise that presentations are shaped through interaction with peers, instructors, institutional expectations, and broader educational contexts. Morita's (2000) ethnographic study represented an important shift in this direction by conceptualising oral academic presentations as processes of discourse socialisation rather than isolated communication events. Her findings demonstrated that competence develops through repeated participation in academic communities where students negotiate expectations with instructors and peers while gradually constructing their presentation identities. Extending this perspective, Liu et al. (2021) demonstrated that online role-reversal activities improved students' ability to anticipate audience expectations and adapt presentation strategies accordingly. Liu et al. (2025) further reported that individual personality traits influenced students' engagement with preparation and revision processes, whereas Loureiro et al. (2020) highlighted oral presentation apprehension as a persistent challenge within professional communication settings.

Additional research reinforces the importance of contextual influences on competence development. Keo et al. (2025) demonstrated that teacher expectations and students' communication strategies jointly shaped presentation performance, while Cheng and Warren (2005) showed that cultural values significantly influenced peer assessment practices within Hong Kong universities. Collectively, these studies broaden understanding of oral presentation competence by demonstrating that competence is socially negotiated rather than individually acquired. However, despite highlighting the importance of context, much of this research remains descriptive and provides limited explanation of the psychological mechanisms through which contextual experiences translate into competence development.

As oral presentation competence became increasingly recognised as an essential graduate attribute, research gradually extended beyond classroom performance towards workplace communication. This shift reflects growing recognition that oral presentation competence should not merely prepare students for academic assessment but should also equip graduates with transferable communication capabilities required in professional settings. Evidence from professional education consistently supports this position. Sornsenee et al. (2024) reported that medical students' oral presentation performance correlated positively with broader healthcare competencies, emphasising the need for reliable assessment within professional training. Likewise, Alwi and Sidhu (2013) found that Malaysian undergraduates perceived themselves as least prepared for workplace presentations during internship despite receiving formal presentation instruction at university. Although Singh (2021) argued that oral presentation skills receive considerable instructional attention within higher education, employer perspectives suggest that important gaps remain. Coffelt et al. (2019) reported that graduates frequently struggle to adapt presentations to diverse audiences, while Schreiber et al. (2012) identified public speaking as a critical employability competence requiring explicit educational support.

The empirical literature demonstrates that oral presentation competence has evolved from being viewed primarily as a communication skill towards being recognised as a complex educational and professional capability shaped by multiple interacting influences. Research has progressively expanded from identifying barriers to examining instructional interventions, sociocultural contexts, and workplace expectations. Nevertheless, existing scholarship remains predominantly concerned with external influences surrounding oral presentation competence, including teaching

approaches, assessment practices, learning environments, and professional demands. Comparatively less attention has been devoted to explaining the internal psychological processes through which students interpret these learning experiences, regulate their engagement, sustain effort, and ultimately develop oral presentation competence. This omission is particularly important because students exposed to similar educational opportunities frequently demonstrate markedly different levels of competence. Understanding this variation requires closer examination of the psychological processes underpinning competence development, which forms the focus of the following section.

2.4 Self-Determination Theory

Self-Determination Theory (SDT), developed by Ryan and Deci (2000, 2017), is one of the most influential theories for explaining human motivation within educational settings. Over the past two decades, the theory has been widely applied to understand how social environments influence students' motivation, engagement, persistence, and learning behaviours by emphasising the fulfilment of individuals' basic psychological needs (Ryan & Deci, 2017; Ryan et al., 2021; Vansteenkiste et al., 2020). Unlike theories that primarily explain behaviour through external reinforcement or cognitive expectations, SDT proposes that individuals possess an inherent tendency towards growth, learning, and self-development (Martela, 2020). However, these natural tendencies do not develop automatically but depend on whether the surrounding environment supports individuals' psychological needs (Ryan & Deci, 2000). Consequently, the theory shifts attention from asking whether students are motivated to understanding how learning environments influence the quality of students' motivation and subsequent learning behaviours. This distinction is particularly relevant within higher education, where students frequently participate in learning activities for a combination of external requirements and personal aspirations.

Central to SDT is the proposition that optimal functioning and psychological development depend upon the satisfaction of three universal psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2017; Vansteenkiste et al., 2020). Autonomy refers to individuals' perceptions that their behaviours are self-endorsed and performed willingly rather than imposed through external pressure or control (Ryan et al., 2021). Within educational settings, autonomy does not imply complete independence but instead reflects students' opportunities to make meaningful

choices, express their perspectives, and take ownership of their learning (Ryan & Deci, 2017; Ryan et al., 2021). Competence refers to individuals' perceptions that they possess the ability to master learning tasks and achieve desired outcomes. Students who perceive themselves as competent are generally more willing to persist when confronted with academic challenges because they believe their efforts will contribute to successful performance (Ryan & Deci, 2017; Guay, 2021). Relatedness concerns individuals' sense of belonging and connection with significant others. Learning environments characterised by supportive relationships between teachers and students encourage greater participation, engagement, and psychological well-being (Ryan et al., 2021; Waterschoot et al., 2022). Collectively, SDT proposes that satisfying these three psychological needs promotes autonomous motivation, whereas frustration of these needs undermines engagement, persistence, and learning.

An important contribution of SDT lies in its explanation of how motivation develops through the process of internalisation. Rather than conceptualising motivation as simply intrinsic or extrinsic, SDT proposes that motivation exists along a continuum ranging from externally regulated behaviours to fully autonomous forms of motivation (Ryan & Deci, 2020). This perspective recognises that learners often begin educational activities because of external expectations but gradually internalise these behaviours as they recognise their personal value and relevance (Ryan & Deci, 2020; Vansteenkiste et al., 2020). The motivation continuum begins with external regulation, in which behaviour is performed primarily to obtain rewards or avoid punishment. As learners begin to internalise external expectations, motivation progresses to introjected regulation, where behaviour is driven by internal pressures such as guilt or obligation. Greater internalisation occurs through identified regulation, whereby learners recognise the personal importance of an activity despite its external origin. This develops further into integrated regulation, in which external values become congruent with individuals' beliefs and identities. Finally, intrinsic motivation represents the most autonomous form of regulation, where individuals engage in activities because they find them inherently interesting, enjoyable, or personally satisfying (Ryan & Deci, 2020).

The process of internalisation provides an important explanation for learning within higher education. Students often participate in learning activities because they are compulsory components of their courses. However, when educational environments support students' needs for autonomy, competence, and relatedness, externally regulated behaviours are more likely to become internalised, resulting in greater engagement,

persistence, and autonomous motivation (Guay, 2021; Niemiec & Ryan, 2009). This process is particularly relevant to oral presentation learning, where students are expected to repeatedly prepare, practise, revise, respond to feedback, and refine their presentation performance throughout a course. Although these activities may initially be undertaken to fulfil assessment requirements, supportive learning environments may gradually encourage students to value these learning experiences (Ryan et al., 2021), resulting in greater ownership of their learning and sustained motivation towards oral presentation development.

The application of SDT within higher education has consistently demonstrated its explanatory value across a wide range of learning outcomes. Previous studies report that autonomy-supportive learning environments promote greater engagement, persistence, self-regulated learning, academic achievement, and psychological well-being (Ryan et al., 2021; Waterschoot et al., 2022). Students who perceive greater autonomy support are more likely to adopt deep learning strategies, demonstrate resilience during academic challenges, and sustain their motivation over time (Ryan et al., 2021; Waterschoot et al., 2022). Similar findings have been reported within second language education, where SDT has been used to explain students' willingness to communicate, classroom participation, speaking performance, and language learning engagement (Dincer et al., 2012; Wang et al., 2024). Collectively, these studies demonstrate that supportive learning environments influence learning not only through instructional practices but also by shaping students' psychological experiences throughout the learning process (Ryan et al., 2021).

Although SDT has been widely applied to explain students' motivation and learning behaviours, recent developments have also emphasised that the relative contribution of autonomy, competence, and relatedness may differ across educational contexts rather than contributing equally under all circumstances (Ryan et al., 2021; Slemp et al., 2021). This perspective highlights the contextual flexibility of SDT and reinforces its suitability for explaining oral presentation learning, where students' motivation is influenced by instructional practices, feedback experiences, classroom interactions, and repeated presentation opportunities. Consequently, rather than treating motivation as a stable individual characteristic, SDT explains how educational environments facilitate students' psychological development through satisfaction of their basic psychological needs.

Accordingly, SDT provides the primary theoretical foundation for the present study because it offers a comprehensive explanation of how supportive learning environments facilitate students' psychological development and subsequently contribute to oral presentation competence. Guided by SDT, the present study proposes that students who perceive greater autonomy support within their learning environment are more likely to engage meaningfully with feedback, sustain perseverance throughout repeated presentation practice, and develop stronger intrinsic motivation towards oral presentation learning. Collectively, these psychological processes are expected to contribute to the development of oral presentation competence. This theoretical perspective therefore underpins the proposed COMPASS Model and provides the rationale for examining perceived autonomy support, feedback literacy, grit, and intrinsic motivation as interconnected psychological processes contributing to oral presentation competence. The following sections review each of these constructs in greater detail before their integration within the proposed theoretical and conceptual frameworks is presented.

2.5 Theoretical Framework

The theoretical framework provides the foundation for explaining the phenomenon investigated in the present study and establishes the rationale for the proposed relationships among the study variables. Specifically, it explains both the multidimensional nature of oral presentation competence and the psychological processes underlying its development. It identifies the theories that best explain both the outcome construct of oral presentation competence and the psychological processes through which it develops. As no single theory sufficiently explains both aspects, the present study integrates the Oral Presentation-Multimodal Framework (OPMM) with Self-Determination Theory (SDT). While OPMM conceptualises oral presentation competence, SDT explains the motivational mechanisms underpinning its development.

The Oral Presentation-Multimodal Framework (OPMM), developed by Radzuan et al. (2023), was selected because it conceptualises oral presentation competence as a multidimensional construct comprising presentation content, multimodal competence, and professionalism. OPMM recognises that effective academic presentations require the integration of disciplinary knowledge, verbal and non-verbal communication skills, and professional presentation behaviours. The

framework reflects the authentic demands of oral presentations in higher education, where students are expected not only to communicate accurately but also to organise ideas coherently, engage audiences effectively, utilise multimodal resources appropriately, and demonstrate professional conduct. Furthermore, OPMM was developed and empirically validated within Malaysian higher education, strengthening its contextual relevance for operationalising oral presentation competence in the present study. Nevertheless, while OPMM defines the dimensions that constitute competent oral presentation performance, it does not explain the psychological mechanisms through which these competencies develop.

The present study adopts Self-Determination Theory (Ryan & Deci, 2000, 2017) as its primary theoretical foundation to explain these underlying psychological processes. SDT posits that individuals are more likely to demonstrate high-quality motivation, sustained engagement, persistence, and adaptive learning behaviours when their psychological needs for autonomy, competence, and relatedness are satisfied (Ryan & Deci, 2017; Vansteenkiste et al., 2020). Within educational settings, the theory provides a mechanism for explaining how supportive learning environments cultivate autonomous forms of motivation that subsequently promote learning and performance (Ryan et al., 2021; Waterschoot et al., 2022). This theoretical perspective closely aligns with the present study, which proposes that autonomy-supportive learning environments enhance students' feedback literacy, grit, and intrinsic motivation before these psychological processes contribute to oral presentation competence. Although some scholars have questioned whether autonomy, competence, and relatedness contribute equally across different learning contexts (Cerasoli et al., 2016; Durksen et al., 2016; Neubauer et al., 2015), subsequent developments of SDT argue that the relative salience of each psychological need is context-dependent rather than universally equivalent (Ryan et al., 2021; Slemp et al., 2021). Consequently, SDT remains sufficiently flexible to explain motivational processes across diverse educational settings, including oral presentation learning, making it the most appropriate theoretical foundation for the present study.

Prior to selecting SDT, Social Cognitive Theory (Bandura, 1986) was considered because it conceptualises learning as the product of reciprocal interactions among personal, behavioural, and environmental factors (Bandura, 1986, 1988, 2008). Within oral presentation learning, SCT explains how students' self-efficacy, observational learning, and mastery experiences influence their willingness to engage

in presentation tasks, regulate their performance, and persist when encountering challenges (Islam et al., 2023; Scott et al., 2024). However, the explanatory focus of SCT differs from that of the present study as it primarily attributes behavioural change to reciprocal determinism and self-efficacy beliefs, which explain how learning behaviours are regulated. Thus, it does not explicitly explain the motivational pathway through which supportive learning environments foster these psychological processes. Furthermore, traditional SCT assumes that cognitive processes operate as relatively stable internal representations, whereas recent perspectives argue that social cognition is adaptive to contextual demands, current goals, and individual states (Castro & Heras-Escribano, 2019; Osborne-Crowley, 2020; Smith & Semin, 2007). Consequently, although SCT provides a robust explanation of behavioural regulation, it does not explicitly account for the motivational pathway proposed in the present study and was therefore not adopted as the overarching theoretical framework.

Grit Theory, proposed by Duckworth et al. (2007), was also considered because perseverance is a fundamental characteristic of successful oral presentation learning, where students repeatedly practise, refine, and improve their presentations over time. The theory conceptualises grit as the combination of perseverance of effort and consistency of interest towards long-term goals (Duckworth et al., 2007) and has been widely applied to explain persistence in educational settings, including second language learning and oral presentation contexts (Wu & Rose, 2025). However, the explanatory scope of Grit Theory differs from the objectives of the present study. While the theory explains why individuals persist in pursuing long-term goals, it does not explain how supportive learning environments cultivate such perseverance. From the perspective of SDT, perseverance may be understood as a psychological process that develops when students experience autonomy-supportive learning environments that foster autonomous motivation. Moreover, empirical evidence consistently demonstrates that perseverance of effort predicts academic achievement more strongly than consistency of interest, raising concerns regarding the theoretical coherence and construct validity of grit as a standalone framework (Credé et al., 2017; Datu, 2021; Jachimowicz et al., 2018; Jordan et al., 2019). Consequently, grit is conceptualised as an important psychological construct within the proposed model rather than as the principal theoretical foundation of the study.

Although SDT, SCT, and Grit Theory originate from different theoretical traditions, they provide complementary perspectives for understanding student learning

and development. SCT explains how students regulate their learning behaviours through reciprocal interactions among personal, behavioural, and environmental factors, whereas Grit Theory explains how sustained perseverance enables individuals to pursue long-term goals despite setbacks and challenges. SDT extends these perspectives by explaining how autonomy-supportive learning environments facilitate the internalisation of motivation and foster adaptive psychological processes. Accordingly, the three theories are not contradictory but address different aspects of students' learning experiences. Within the present study, SDT serves as the overarching theoretical foundation because it explains the sequential motivational pathway proposed in the COMPASS Model, while SCT and Grit Theory provide complementary theoretical perspectives that support the conceptualisation of feedback literacy and grit as psychological processes contributing to oral presentation competence.

The integration of OPMM and SDT provides a comprehensive theoretical explanation of oral presentation competence by addressing two complementary theoretical questions. OPMM explains what constitutes competent oral presentation performance by conceptualising the multidimensional outcome through presentation content, multimodal competence, and professionalism. In contrast, SDT explains how students develop these competencies by emphasising the role of autonomy-supportive learning environments in fostering adaptive psychological processes. Guided by SDT, perceived autonomy support creates conditions that encourage students to engage meaningfully with feedback, develop sustained perseverance, and strengthen intrinsic motivation. By integrating these complementary theoretical perspectives, the present study explains both the multidimensional nature of oral presentation competence and the psychological mechanisms underlying its development. The integrated theoretical framework underpinning the present study is illustrated in Figure 2.1.

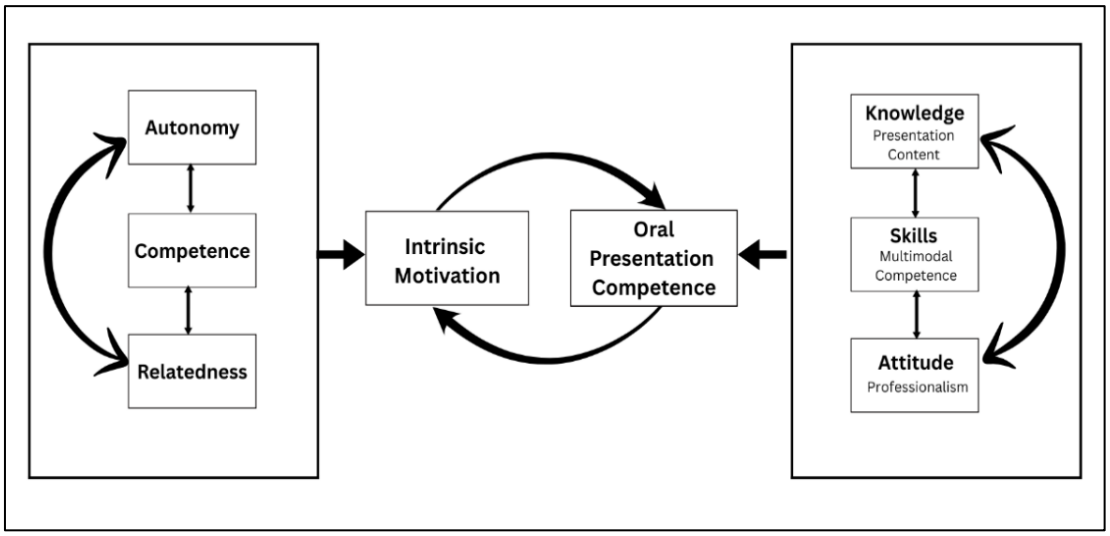


Figure 2.1 Theoretical Framework

In summary, the present study adopts a theoretical framework that combines OPMM and SDT to explain oral presentation competence. OPMM provides the conceptual basis for defining the outcome construct, whereas SDT explains the psychological processes through which the outcome is developed. Although SCT and Grit Theory offer insights into self-regulated learning and sustained perseverance respectively, neither independently explains the sequential motivational pathway proposed in the present study. Collectively, the integration of OPMM and SDT provides a coherent theoretical justification for the COMPASS Model and the relationships examined in the present study.

2.6 Perceived Autonomy Support

Self-Determination Theory (SDT) positions autonomy as one of three basic psychological needs and considers it fundamental to fostering self-determined motivation (Deci & Ryan, 1985; Ryan & Deci, 2000, 2020). Within SDT, autonomy refers to the experience of acting with a sense of volition and psychological freedom rather than feeling pressured or controlled by external forces. Importantly, autonomy should not be equated with independence. Ryan and Deci (2020) and Jang et al. (2016) argued that individuals may act autonomously while working collaboratively with others, provided that their actions are experienced as self-endorsed. This distinction highlights that autonomy is concerned with the perceived source of one's behaviour rather than whether the activity is performed individually or collectively.

Deci and Ryan (1985) proposed three causality orientations: autonomy, control, and impersonal orientations to explain how individuals regulate their behaviour. Individuals with an autonomy orientation initiate action because they find them personally meaningful, whereas those with a control orientation are primarily influenced by external expectations and rewards. In contrast, an impersonal orientation reflects feelings of helplessness and a perceived lack of control over outcomes. Consequently, the same external event may be experienced differently depending on how it is perceived. Informational events tend to support autonomy and competence, controlling events restrict choice, whereas amotivating events undermine both competence and persistence. This proposition forms the theoretical basis of autonomy support within SDT, suggesting that learning environments should encourage students to act out of personal interest rather than external pressure.

In educational settings, autonomy support refers to teaching practices that nurture students' volition and self-determination. Autonomy-supportive teachers provide meaningful rationales, acknowledge students' perspectives, minimise controlling language, and encourage initiative and choice (Reeve & Halusic, 2009; Ryan & Deci, 2000). In contrast, controlling teaching practices that pressure compliance or dismiss students' viewpoints have been shown to undermine motivation (Assor et al., 2002). Research has consistently demonstrated that autonomy-supportive teaching promotes engagement, persistence, and psychological well-being. For example, Jang et al. (2010) found that although both autonomy support and classroom structure predicted behavioural engagement, only autonomy support uniquely predicted students' self-reported engagement. This finding suggests that while classroom structure remains important, students' perceptions of autonomy support play a distinctive role in shaping their motivational experiences.

Extending this line of work, Reeve and Cheon (2021) demonstrated that autonomy-supportive teaching is not merely a personal teaching style but a practice that can be intentionally developed. Teachers who participated in autonomy-supportive training became more effective at taking students' perspectives, providing meaningful rationales, supporting students' interests, and reducing controlling behaviours. These changes subsequently increased students' satisfaction of their needs for autonomy, competence, and relatedness while reducing need frustration. Collectively, these findings indicate that autonomy-supportive teaching can be deliberately cultivated and

that its effectiveness lies not only in teachers' instructional practices but also in how these practices are experienced by students.

This distinction gives rise to the concept of perceived autonomy support (PAS). Whereas autonomy support refers to the practices teachers intend to provide, PAS reflects students' subjective perceptions of whether those practices support their autonomy and self-determination (Black & Deci, 2000; Soenens & Vansteenkiste, 2010). PAS therefore refers to students' perceptions that teachers provide meaningful choices, acknowledge their perspectives, and minimise controlling behaviours, thereby encouraging volitional and self-determined learning. This distinction is particularly important because teachers may believe they are providing autonomy support, yet students may interpret the same behaviours differently. Consequently, students' perceptions of autonomy support are often more informative than teachers' self-reports when explaining learning outcomes. Consistent with this view, Black and Deci (2000) and Sierens et al. (2009) found that PAS more consistently predicted students' intrinsic motivation, engagement, and well-being than teachers' reported teaching practices.

Within SDT, PAS is understood as a learning condition that facilitates the satisfaction of students' basic psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2000, 2020). Although autonomy support primarily fulfils students' need for volition, it also creates conditions that facilitate competence through constructive guidance and relatedness through supportive teacher-student interactions. More recent studies continue to reinforce the importance of PAS in contemporary education. For example, Kingsford-Smith et al. (2024) identified PAS as an important contributor to sustaining students' motivation in higher education, while Zhang et al. (2024) linked PAS with feedback literacy and persistence. These studies collectively suggest that students' perceptions of autonomy-supportive learning environments create favourable conditions for motivation and effective learning processes.

2.6.1 Perceived Autonomy Support in Oral Communication

Having established perceived autonomy support (PAS) as an important motivational construct within Self-Determination Theory, it is necessary to examine how it has been applied within oral communication research. Oral communication differs from many other learning activities because it requires students to express ideas publicly, respond spontaneously, and communicate despite the possibility of making

mistakes or being negatively evaluated. Consequently, students' perceptions of autonomy support may be particularly important in oral communication contexts, where confidence, voluntary participation, and psychological safety influence their willingness to speak.

One of the most consistent findings in the literature is the positive association between PAS and students' willingness to communicate (WTC). Across different language learning contexts, students who perceive greater autonomy support consistently demonstrate greater willingness to participate in classroom communication. For example, Namaziandost et al. (2025) reported that enhancing students' autonomy and engagement significantly fostered their willingness to communicate in English while also improving self-esteem and L2 grit. Similarly, Zarrinabadi et al. (2021) found that teacher autonomy support predicted students' language mindsets, which subsequently enhanced communicative competence and willingness to communicate. Although these studies examined different psychological mechanisms, they converge on the view that autonomy-supportive learning environments encourage students to participate in oral communication voluntarily rather than out of obligation. Importantly, while additional psychological outcomes such as self-esteem, L2 grit, and language mindsets were reported, these variables should be interpreted as accompanying findings rather than the primary explanation for students' willingness to communicate. The consistency of these findings therefore strengthens the argument that PAS is particularly relevant for encouraging students' active participation in oral communication.

Beyond encouraging students to communicate, the literature also suggests that PAS contributes to the emotional conditions necessary for effective oral communication. Grieve et al. (2021) found that university students perceived greater autonomy support as important for reducing their fear of oral presentations and public speaking. Likewise, Tan et al. (2021) demonstrated that autonomy-supportive and culturally responsive learning environments predicted both general and intercultural willingness to communicate through the satisfaction of basic psychological needs, autonomous motivation, and lower communication anxiety. Although these studies employed different methodological approaches and examined different outcome variables, they point towards a common conclusion: autonomy-supportive learning environments appear to reduce the psychological pressures that often discourage students from speaking. However, the evidence should be interpreted cautiously.

Neither study demonstrates that PAS directly reduces communication anxiety; rather, the findings suggest that students who perceive greater autonomy support are more likely to experience learning environments characterised by greater psychological safety and autonomous motivation. This distinction positions PAS as a contextual condition that facilitates oral communication instead of a direct intervention for communication apprehension.

A further pattern emerging from the literature concerns the influence of PAS on classroom experiences that shape oral participation. Cui et al. (2024) demonstrated that perceived autonomy support, together with study interest and enthusiasm, was negatively associated with class-related boredom among Chinese English majors. In contrast, Altendorf et al. (2019) found no significant differences in perceived autonomy support when comparing autonomy-supportive and controlling message framing within a health communication setting. Although these findings may initially appear inconsistent, they address different aspects of autonomy support. Cui et al. (2024) examined students' broader learning experiences, whereas Altendorf et al. (2019) focused on isolated instructional messages. Taken together, these studies suggest that autonomy support is unlikely to be established through individual teaching strategies alone but instead reflects students' overall experiences within the classroom. Consequently, the effectiveness of PAS in promoting oral communication may depend on the consistency with which autonomy-supportive practices are embedded throughout teaching and learning rather than on isolated classroom interventions.

Evidence linking PAS with oral communication performance remains comparatively limited but generally supportive. Wang et al. (2024) found that perceived autonomy support positively predicted English-speaking performance directly while also demonstrating indirect associations through classroom engagement and basic psychological need satisfaction. Similarly, Zaman (2024) reported that learner autonomy positively influenced university students' presentation skills and promoted self-regulated learning. However, these findings should be interpreted with caution because Zaman (2024) examined learner autonomy rather than students' perceptions of teacher autonomy support. Although both studies point towards the importance of autonomy in supporting speaking performance, they are conceptually distinct and therefore should not be regarded as equivalent evidence for PAS. Nevertheless, they provide preliminary support for the proposition that autonomy-supportive learning

environments are associated with stronger oral communication performance, while also highlighting the need for further empirical investigation.

Overall, the literature consistently positions PAS as an important contextual factor in oral communication. Across different educational settings, autonomy-supportive learning environments have been associated with greater willingness to communicate, more favourable emotional conditions for speaking, stronger classroom engagement, and improved oral communication performance. At the same time, the literature also reveals several important boundaries. Most existing studies have examined general classroom communication, second-language speaking, or willingness to communicate, whereas comparatively fewer studies have investigated formal oral presentation contexts. Moreover, improvements in oral communication have often been examined alongside broader motivational and psychological outcomes, making it difficult to determine the specific learning processes through which PAS contributes to presentation development. Building on this contextual understanding, the following section examines the relationship between perceived autonomy support and feedback literacy, which forms the basis of Hypothesis 1.

2.6.2 Relationship between Perceived Autonomy Support and Feedback Literacy

Having discussed the role of perceived autonomy support in promoting students' oral presentation development, it is important to consider how autonomy-supportive learning environments influence students' engagement with feedback. As students are increasingly expected to regulate their own learning, they must also be able to seek, interpret, evaluate, and apply feedback to improve subsequent performance. Consequently, researchers have increasingly examined whether autonomy-supportive learning environments also contribute to the development of students' feedback literacy. From the perspective of Self-Determination Theory (Ryan & Deci, 2000, 2017), students who perceive greater autonomy support are more likely to become active participants in their own learning. Rather than relying solely on instructors, they are encouraged to reflect on their learning, evaluate their progress, and use feedback to improve future performance. This theoretical perspective suggests that perceived autonomy support provides favourable conditions for the development of feedback literacy.

Evidence from qualitative studies generally supports this proposition by demonstrating that autonomy-supportive teaching practices encourage students to engage more actively with feedback. Matthews et al. (2023) examined staff–student partnerships around feedback and assessment through recorded conversations in workshop settings and found that when instructors genuinely listened to students' perspectives, richer feedback dialogues emerged that enhanced students' capacity to seek, interpret, and use feedback, supporting the earlier findings reported by Beenen et al. (2017). However, Matthews et al. (2023) also cautioned that the development of feedback literacy is not automatic, echoing Sutton's (2012) argument that students' engagement with feedback is shaped by both relational and structural conditions. These findings suggest that although autonomy-supportive teaching creates opportunities for students to engage more meaningfully with feedback, the development of feedback literacy also depends on whether the learning environment encourages students to act upon that feedback. Therefore, autonomy support appears to be an important, but not necessarily sufficient, condition for developing feedback literacy.

Quantitative evidence further reinforces the positive relationship between perceived autonomy support and feedback literacy while also suggesting that the relationship is more complex than a simple direct association. Zhang et al. (2024) reported that perceived autonomy support directly enhanced feedback literacy among secondary school students while also exerting indirect effects through the satisfaction of basic psychological needs and intrinsic motivation. Similarly, Chen et al. (2024) found that perceived autonomy support positively influenced feedback literacy, although the relationship became stronger when self-efficacy was incorporated into the model. Although different mediating mechanisms were examined, both studies consistently indicate that perceived autonomy support contributes positively to feedback literacy. At the same time, the inclusion of additional psychological variables suggests that autonomy support alone may not fully explain how students develop feedback literacy. Rather, its influence may operate alongside other psychological processes that encourage students to engage more actively with feedback.

Evidence from related educational contexts provides further support for this relationship, although feedback literacy was not examined directly. Hernández et al. (2022) demonstrated that instructor autonomy support predicted students' basic psychological need satisfaction, which subsequently promoted greater self-regulated and evaluative learning behaviours. Similarly, Wang et al. (2024) found that autonomy

support enhanced speaking performance through classroom engagement and the satisfaction of basic psychological needs. Although neither study measured feedback literacy explicitly, both reinforce the argument that autonomy-supportive learning environments encourage students to take greater responsibility for their own learning. Such behaviours closely reflect the characteristics of feedback-literate learners, who actively seek, interpret, and apply feedback to improve future performance. Nevertheless, because feedback literacy was inferred rather than measured directly, these studies provide indirect rather than conclusive evidence supporting the proposed relationship.

Overall, the reviewed studies consistently suggest that perceived autonomy support contributes positively to the development of students' feedback literacy. Most existing studies have been conducted in broader educational or language learning settings, with comparatively little attention given to oral presentation competence. This indicates that the relationship between perceived autonomy support and feedback literacy remains underexplored within oral presentation learning. Therefore, the present study proposes the following hypothesis:

H1: Perceived autonomy support positively influences feedback literacy.

2.7 Feedback Literacy

Feedback has long been recognised as one of the most influential factors affecting student learning and achievement because it enables learners to identify discrepancies between their current and desired performance and provides guidance for subsequent improvement (Hattie & Timperley, 2007). However, despite its well-established educational benefits, research has consistently shown that providing feedback alone does not necessarily result in improved learning. Students often struggle to interpret feedback, evaluate its relevance, or translate it into meaningful action (Wisniewski et al., 2020). This inconsistency shifted scholarly attention from examining how feedback is delivered to understanding how students engage with and use feedback. Emerging from this shift is the concept of feedback literacy, which focuses on the knowledge, capacities, and dispositions required for learners to make effective use of feedback (Brooks et al., 2021; To, 2021).

The conceptualisation of feedback literacy has evolved alongside broader changes in educational theory. Early discussions were influenced by the Academic

Literacies framework proposed by Lea and Street (1998, 2006), which argued that learning extends beyond the acquisition of technical skills to include students' participation in disciplinary communities and the negotiation of meaning and identity. Building on this perspective, Sutton (2012) introduced the term feedback literacy and proposed that students require three interrelated forms of literacy to engage effectively with feedback: epistemological literacy, which enables students to understand the purpose and value of feedback; ontological literacy, which relates to learners' willingness to accept and reflect on evaluative comments; and practical literacy, which refers to their ability to translate feedback into future improvement. Sutton's framework represented an important conceptual shift by positioning students as active participants in the feedback process rather than passive recipients. However, because the framework remained largely conceptual, it provided limited guidance for empirical investigation or measurement across different educational contexts.

Responding to this limitation, Carless and Boud (2018) reconceptualised feedback literacy as the understandings, capacities, and dispositions needed to make sense of and use feedback to enhance learning. Their framework comprises four interconnected dimensions: appreciating feedback, making judgements, managing affect, and taking action. Unlike earlier conceptualisations, this framework operationalises feedback literacy through observable learner behaviours, making it more suitable for empirical research. The framework has since become the most widely adopted conceptualisation in higher education because it captures not only students' understanding of feedback but also their ability to regulate emotions, evaluate performance, and implement feedback to improve future learning (Carless & Boud, 2018).

Although Carless and Boud's (2018) framework has gained widespread acceptance, subsequent scholarship suggests that feedback literacy continues to evolve conceptually. Gravett (2020) argued that feedback literacy should not be viewed solely as an individual learner attribute but as a relational process enacted through interactions between students and feedback providers. Similarly, Nieminen and Carless (2023) distinguished between sociocultural and skills-based perspectives, demonstrating that feedback literacy may be understood either as participation within feedback practices or as a set of individual competencies that learners develop over time. While these perspectives differ in emphasis, they are not mutually exclusive. Rather, they collectively suggest that feedback literacy is a multidimensional construct

encompassing cognitive, behavioural, affective, and social dimensions. Consequently, recent discussions have shifted from questioning the importance of feedback literacy towards refining how it should be conceptualised and operationalised within different educational settings.

The growing recognition of feedback literacy as a multidimensional construct has also led to its increasing conceptualisation as a psychological capacity. From this perspective, students' engagement with feedback depends not only on the quality of feedback they receive but also on their beliefs, emotions, and willingness to regulate their own learning (Han & Xu, 2019; Song, 2022). This perspective aligns with Social Cognitive Theory (Bandura, 1986), which explains learning as the reciprocal interaction between personal, behavioural, and environmental factors (Schunk & DiBenedetto, 2020). Accordingly, learners' responses to feedback are influenced by both individual psychological characteristics and the learning environment in which feedback is provided. Recent empirical studies further support this conceptualisation by operationalising feedback literacy as a latent psychological construct with satisfactory psychometric properties across different educational settings (Wancham & Tangdhanakanond, 2025; Woitt et al., 2023; Zhan, 2021). Collectively, these studies suggest that feedback literacy extends beyond a pedagogical practice and is increasingly recognised as a psychological capacity that shapes how learners interpret, evaluate, and act upon feedback.

Based on this conceptual evolution, the present study adopts the psychological conceptualisation of feedback literacy proposed by Carless and Boud (2018). This perspective is considered most appropriate because the present study seeks to explain individual differences in students' engagement with feedback within oral presentation contexts, where learners are required not only to receive feedback but also to interpret, evaluate, and apply it to improve subsequent performance. Conceptualising feedback literacy as a psychological construct also aligns with the assumptions of Self-Determination Theory, which views learning as an active process shaped by learners' internal psychological resources. Furthermore, adopting this perspective allows feedback literacy to be examined as both a predictor and a mediating construct within the proposed model. The following section therefore reviews how feedback literacy has been examined specifically within oral communication contexts.

2.7.1 Feedback Literacy in Oral Communication

Having conceptualised feedback literacy as learners' capacity to interpret, evaluate, and use feedback, it is important to examine how this construct has been discussed within oral communication research. Oral communication differs from many other forms of assessment because students receive feedback that is often immediate, public, and interactive. Unlike written assignments, students are required to process evaluative comments while managing their emotions and applying the feedback to improve future performances. Consequently, students' ability to engage with feedback becomes particularly important in oral communication, where improvement often occurs through repeated cycles of performance, feedback, reflection, and refinement.

Although feedback has long been recognised as an important component of oral communication, much of the existing literature has focused on the effectiveness of feedback practices rather than students' feedback literacy. Across oral presentation studies, improvements in performance appear to depend not only on the source of feedback but also on students' ability to engage with and use the feedback they receive. For example, van Ginkel et al. (2017) demonstrated that teacher feedback was most effective in promoting presentation behaviour, whereas peer and self-assessment contributed less unless they were carefully structured. Similarly, Murillo-Zamorano and Montanero (2017) found that rubric-supported peer feedback produced greater short-term improvements in oral presentations than teacher feedback, although these improvements were not sustained over time. While these studies examined different sources of feedback, both highlight that feedback alone is insufficient to improve oral presentations. Instead, students require appropriate scaffolding through tools such as rubrics, videos, and repeated opportunities to practise so that they are able to interpret, evaluate, and apply feedback meaningfully. This suggests that the value of feedback in oral presentations depends not only on the quality of feedback provided but also on students' feedback literacy.

The literature also suggests that the way feedback is delivered influences how students engage with evaluative information. Colognesi et al. (2020) reported that orally discussed peer feedback resulted in greater improvements in speaking skills than written peer feedback because students were able to exchange ideas, negotiate meaning, and generate more constructive suggestions (Razawi & Mohamad, 2024). Similarly, Park (2024) found that video feedback promoted reflective learning and learner autonomy,

with students appreciating the opportunity to revisit feedback beyond the immediacy of classroom performance. Although these studies investigated different feedback approaches, they point towards a similar conclusion. Feedback appears to be more meaningful when students actively engage with it through discussion, reflection, and evaluation rather than simply receiving comments on their performance. This indicates that feedback literacy in oral communication is developed through active engagement with feedback rather than the passive receipt of evaluative information.

Collectively, these studies demonstrate that feedback is an important component of oral communication learning. However, a closer examination of the literature suggests that the primary focus has remained on feedback practices, including the source, mode, or delivery of feedback, rather than on feedback literacy itself. In other words, previous studies have largely examined how feedback should be provided to improve speaking performance, while comparatively less attention has been given to students' capacity to understand, evaluate, and use feedback to improve subsequent oral performances. This distinction is important because improvements in oral presentation are unlikely to occur through feedback alone but through students' ability to engage with feedback throughout the learning process. Consequently, although the educational value of feedback in oral communication is well established, the role of feedback literacy within oral presentation contexts remains comparatively underexplored. Building on this gap, the following section examines the relationship between feedback literacy and grit which forms the basis of Hypothesis 2.

2.7.2 Relationship between Feedback Literacy and Grit

The previous section highlighted that feedback literacy extends beyond students' ability to receive feedback and instead reflects their capacity to interpret, evaluate, and apply feedback to improve future performance. In oral presentation contexts, however, improvement is rarely achieved after a single performance. Students are often required to rehearse repeatedly, respond to evaluative feedback, refine both the content and delivery of their presentations, and continue improving despite criticism, performance anxiety, or unsatisfactory outcomes. This suggests that acting on feedback requires more than the ability to understand and use feedback effectively; it also requires students to sustain their effort throughout repeated cycles of feedback and improvement. Such persistence is reflected in the concept of grit, which emphasises

sustained effort and perseverance towards long-term goals. Against this backdrop, the following discussion examines whether feedback literacy may contribute to the development of grit.

Although empirical evidence directly examining the relationship between feedback literacy and grit remains limited, an emerging body of literature suggests that students who are able to interpret, evaluate, and act upon feedback are more likely to display behaviours associated with grit. Across different educational settings, these behaviours include sustained effort, responsibility for learning, and persistence despite challenges. For example, Ajjawi et al. (2023) reported that limited feedback literacy was associated with feedback avoidance behaviours, reducing students' willingness to remain engaged with learning. In contrast, Calafato (2024) found that students who were able to interpret and apply feedback experienced greater enjoyment of learning, which strengthened perseverance, a central component of grit. Likewise, Rad and Mirzaei (2024) showed that students who actively set goals, monitored their progress, and took responsibility for their learning demonstrated higher levels of grit. These findings are consistent with those of Lee (2021) and Yu et al. (2022), who associated similar self-regulatory behaviours with feedback literacy. Although these studies examined different educational contexts and outcomes, they converge on the view that productive engagement with feedback encourages behaviours that closely reflect the characteristics of grit.

Nevertheless, the direction of this relationship remains open to debate. Much of the existing literature has treated grit as a relatively stable learner characteristic that shapes how students engage with feedback rather than considering whether feedback literacy may itself contribute to the development of grit (Rhodes & Giovannetti, 2022). Consistent with this perspective, Weidlich et al. (2025) proposed grit as an antecedent of feedback attitudes and practices. However, their findings only partially supported this assumption, as perseverance of effort demonstrated a small positive effect, whereas consistency of interest was unrelated to feedback attitudes and practices. Similarly, Zhang and Jiang (2025) found that students with higher levels of grit were more likely to monitor feedback and seek clarification in writing classes, while Luan and Quan (2025) reported that only perseverance of effort predicted feedback monitoring, with no significant relationship observed for consistency of interest. An important pattern emerging from these studies is that the relationship appears to be more consistently associated with perseverance of effort than with consistency of interest. This suggests

that feedback literacy may be particularly relevant in supporting learners' sustained effort during repeated cycles of feedback and improvement. Nevertheless, because grit is conceptualised in the present study as a higher-order construct comprising both perseverance of effort and consistency of interest, the proposed relationship is examined at the construct level rather than at the level of individual dimensions. Collectively, these findings indicate that the relationship between feedback literacy and grit may be more complex than previously assumed and should not be viewed as unidirectional.

A closer examination of the literature also reveals that previous studies have primarily conceptualised feedback literacy as an outcome of grit rather than considering whether repeated engagement with feedback may itself cultivate perseverance. This distinction is important because engaging with feedback requires students to interpret evaluative comments, regulate emotional responses, and repeatedly implement improvements over time. These learning behaviours closely resemble the behavioural characteristics associated with grit, particularly perseverance of effort. Consequently, it is theoretically plausible that feedback literacy may not merely reflect learners' existing levels of grit but may also contribute to the development of persistence through repeated engagement with feedback.

This proposition is further supported by Self-Determination Theory, which suggests that students are more likely to persist when they experience competence in their learning. Students with stronger feedback literacy are better able to understand and act upon feedback, enabling them to recognise improvement and experience greater competence throughout the learning process. As students experience repeated improvement, they are more likely to sustain their effort despite challenges and continue refining subsequent performances. This mechanism is particularly relevant in oral presentation contexts, where students are expected to repeatedly rehearse, respond to feedback, and improve both the content and delivery of their presentations. Such repeated engagement with feedback provides a theoretical explanation for why feedback literacy may contribute to behaviours associated with grit.

Collectively, the current literature provides promising but largely indirect evidence that feedback literacy may contribute to grit. However, most empirical studies have examined the reverse direction by positioning grit as a predictor of feedback-related behaviours rather than investigating whether feedback literacy itself influences grit. Consequently, empirical evidence supporting this pathway remains limited, particularly within oral presentation contexts. Addressing this gap, the present study

examines the influence of feedback literacy on grit in oral presentation contexts. Accordingly, the following hypothesis is proposed:

H2: Feedback literacy significantly influences grit.

2.7.3 Feedback Literacy as a Mediator

The preceding discussion established that feedback literacy may contribute to the development of grit by enabling students to engage constructively with feedback and sustain their effort despite learning challenges. However, feedback literacy is also unlikely to develop independently. As discussed in Section 2.6.3, students' feedback literacy is influenced by the extent to which they perceive their learning environment to be autonomy-supportive. Taken together, these relationships suggest that feedback literacy may function as an explanatory mechanism through which perceived autonomy support contributes to the development of grit. This proposition is examined in the following discussion.

Self-Determination Theory provides a theoretical basis for this proposition. Within SDT, autonomy-supportive learning environments encourage students to take ownership of their learning by supporting their needs for autonomy and competence (Ryan & Deci, 2000). Students who perceive greater autonomy support are therefore more likely to engage actively with feedback, develop stronger feedback literacy, and subsequently sustain their effort when faced with learning challenges. From this perspective, feedback literacy is not simply an outcome of autonomy support but a psychological process through which supportive learning environments may foster behaviours associated with grit.

Emerging empirical evidence also provides preliminary support for this proposition. Zhang et al. (2024), in a large-scale study involving 704 Chinese secondary school students, found that teacher autonomy support directly enhanced feedback literacy while also exerting indirect effects through basic psychological needs and intrinsic motivation. Similarly, Wu et al. (2025) reported that feedback literacy mediated the relationship between teacher support and academic achievement, demonstrating that students who perceived greater teacher support were more likely to develop stronger feedback literacy, which subsequently contributed to improved learning outcomes. Although these studies examined different educational outcomes, they converge on the view that feedback literacy functions as an important

psychological mechanism linking supportive learning environments with positive learning outcomes.

Nevertheless, the current evidence should be interpreted cautiously. These studies have primarily examined feedback literacy as a mediator of academic achievement, motivation, or basic psychological need satisfaction rather than grit. In addition, the mediating role of feedback literacy has rarely been examined within oral communication contexts, where students are required to repeatedly interpret, evaluate, and apply feedback while persisting through evaluative performance tasks. Consequently, it remains unclear whether feedback literacy functions as the mechanism through which perceived autonomy support contributes to the development of grit in oral presentations. Addressing this gap, the present study examines feedback literacy as a mediator between perceived autonomy support and grit. Accordingly, the following hypothesis is proposed:

H5: Feedback literacy significantly mediates the relationship between perceived autonomy support and grit.

2.8 Grit

Grit has emerged as one of the most widely discussed non-cognitive constructs in the teaching and learning literature due to its emphasis on perseverance and passion in the pursuit of long-term goals. Since its conceptualisation by Duckworth et al. (2007), grit has received considerable scholarly attention as a psychological factor associated with persistence, resilience, and academic success. At the same time, its growing popularity has generated ongoing debates concerning its conceptual clarity, dimensionality, measurement, and predictive validity. These debates have important implications for how grit should be conceptualised and operationalised in educational research. Accordingly, this section first discusses the conceptualisation and measurement of grit before critically examining the major debates surrounding the construct and justifying the conceptual position adopted in the present study.

Duckworth et al. (2007) conceptualised grit as a higher-order construct comprising two complementary dimensions: perseverance of effort (PE) and consistency of interest (CI), as illustrated in Figure 2.5. Perseverance of effort captures an individual's tendency to persist through challenges and setbacks in pursuit of long-term goals, whereas consistency of interest reflects the sustained passion required to

remain committed to those goals over time (Credé et al., 2017; Duckworth & Quinn, 2009). This conceptualisation has been widely adopted because it extends beyond short-term motivation by emphasising sustained commitment towards long-term achievement. Nevertheless, subsequent research has questioned whether these two dimensions contribute equally to educational outcomes (Credé et al., 2017; Credé, 2018; Muenks et al., 2017). While perseverance of effort has consistently demonstrated stronger associations with academic performance, the contribution of consistency of interest appears weaker and more context-dependent. These inconsistencies have prompted continuing debate over whether grit should be conceptualised as a higher-order construct or whether perseverance of effort and consistency of interest should be examined independently.

As a psychological construct (Luthans et al., 2018; Usher et al., 2019), grit has been positioned within the broader domain of non-cognitive factors that sustain motivation and effort over time (Credé et al., 2017; Duckworth & Gross, 2014). Unlike cognitive abilities such as intelligence, grit reflects dispositional qualities that influence how learners regulate their behaviours in the pursuit of long-term goals. Consequently, grit has frequently been associated with psychological processes such as self-regulation, mindset, and intrinsic motivation (Datu et al., 2016; Teimouri et al., 2020). In applied linguistics, grit has also been conceptualised as a domain-specific psychological construct, commonly referred to as L2 grit, which predicts sustained effort throughout second language learning (Alamer, 2021; Mikami & Shiozawa, 2024). Duckworth and Gross (2014) further distinguished grit from self-control by arguing that self-control enables learners to resist short-term temptations to achieve immediate goals, whereas grit reflects sustained commitment towards superordinate long-term goals despite repeated setbacks. Although this distinction provides theoretical support for conceptualising grit as a unique psychological construct, subsequent studies have questioned whether grit offers sufficient explanatory value beyond established constructs such as conscientiousness and broader self-regulatory processes, suggesting that its conceptual distinctiveness remains open to debate (Credé et al., 2017; Ivcevic & Brackett, 2014).

The development of the Short Grit Scale (Grit-S) by Duckworth and Quinn (2009) represented an important milestone in grit research. Developed as a concise eight-item alternative to the original 12-item Grit Scale, the Grit-S demonstrated satisfactory internal consistency, test–retest reliability, consensual validity, and

predictive validity across diverse samples, including West Point cadets, Ivy League undergraduates, spelling bee contestants, and adolescents. The scale subsequently became the dominant instrument for measuring grit and has been widely adopted in educational psychology, including later domain-specific adaptations such as the L2 Grit Scale (Teimouri et al., 2020). The widespread adoption of the Grit-S has undoubtedly strengthened the consistency of grit research by providing researchers with a common measurement framework. However, its popularity has also intensified scholarly scrutiny regarding the construct itself.

A closer examination of the literature reveals that the debates surrounding grit largely centre on three related issues: its dimensionality, predictive validity, and conceptual distinctiveness. First, several scholars have questioned whether perseverance of effort and consistency of interest contribute equally to educational outcomes. Credé et al. (2017), through a comprehensive meta-analysis, concluded that grit demonstrated only modest relationships with academic achievement and retention, with most of its predictive power attributable to perseverance of effort rather than consistency of interest. Building on this finding, Credé (2018) argued that combining both dimensions into a single score may reduce predictive validity and obscure their individual contributions. Similarly, Muenks et al. (2017) found that consistency of interest contributed little to educational outcomes compared to perseverance of effort. Collectively, these findings suggest that perseverance of effort consistently demonstrates stronger explanatory value than consistency of interest, thereby raising questions about whether the two dimensions should continue to be interpreted as equally important components of grit.

Second, scholars have questioned whether grit represents a conceptually distinct construct or largely overlaps with existing psychological constructs. Credé et al. (2017) reported substantial overlap between grit and conscientiousness, raising concerns regarding the incremental validity of grit. Likewise, Ivcevic and Brackett (2014) argued that grit shares considerable similarities with broader self-regulatory processes, suggesting that its contribution beyond established constructs remains uncertain. Rather than dismissing grit as a useful construct, these findings suggest that its predictive value should be interpreted alongside other well-established psychological factors rather than in isolation.

Third, growing cross-cultural evidence suggests that grit may not function uniformly across educational contexts. Datu et al. (2016) proposed a triarchic model of

grit incorporating adaptability, arguing that perseverance and adaptability may be more salient than consistency of interest in collectivist cultures. Similarly, Datu et al. (2017) and Schmidt et al. (2020) highlighted cross-cultural variations in grit's predictive validity, suggesting that consistency of interest may not demonstrate the same explanatory value outside Western educational settings. These findings indicate that grit should be interpreted within its educational and cultural context rather than assuming that its dimensions operate uniformly across different learner populations.

Despite these ongoing debates, the present study adopts Duckworth et al.'s (2007) conceptualisation of grit as a higher-order construct comprising perseverance of effort and consistency of interest. This position is adopted for three reasons. First, it remains the most widely operationalised conceptualisation within educational psychology and language learning research. Second, the Grit-S and its subsequent adaptations have demonstrated acceptable psychometric properties across diverse educational contexts, including second language learning (Duckworth & Quinn, 2009; Teimouri et al., 2020). Finally, the purpose of the present study is not to compare the relative contribution of perseverance of effort and consistency of interest, but to examine grit as an overarching psychological construct within the proposed conceptual framework.

2.8.1 Grit in Oral Communication

The previous section established grit as a psychological construct comprising perseverance of effort and consistency of interest. More recently, researchers have extended the construct into oral communication and second language learning contexts, recognising that speaking tasks require learners to sustain effort despite repeated mistakes, communication anxiety, and evaluative pressure. Collectively, this growing body of research suggests that grit contributes to oral communication not merely by encouraging persistence but also by shaping learners' affective experiences, communicative behaviours, and speaking performance (Huang et al., 2025; Lee, 2020; Sun et al., 2024; Wu & Rose, 2025). Nevertheless, the literature also indicates that the two dimensions of grit do not contribute equally to these outcomes.

Existing research can be broadly organised into three interconnected strands. The first examines the relationship between grit and willingness to communicate (WTC), together with the affective factors that support oral participation. Across these

studies, perseverance of effort consistently demonstrates stronger explanatory value than consistency of interest. Huang et al. (2025) and Lee (2020) reported that perseverance predicted WTC both directly and indirectly through classroom enjoyment, whereas consistency showed little or no significant contribution. Similarly, Lee and Drajati (2019) found that grit, alongside self-confidence and motivation, significantly predicted WTC among Indonesian learners, highlighting the importance of perseverance within Southeast Asian language learning contexts. Collectively, these findings suggest that perseverance enables learners to remain engaged in oral communication despite communicative challenges, whereas consistency of interest appears to exert a less stable influence that is often dependent on other motivational and emotional factors.

The second strand positions grit as a predictor of oral communication performance. Sun et al. (2024) and Xu and Zhang (2025) demonstrated that perseverance of effort directly predicted speaking performance and willingness to communicate, whereas consistency exerted weaker and more indirect effects through motivational beliefs. Li (2025), however, cautioned that high consistency of interest may even intensify performance anxiety, suggesting that sustained passion for language learning does not necessarily translate into communicative confidence. Similarly, Wu and Rose (2025) found that L2 grit was the strongest predictor of Pecha Kucha presentation performance, surpassing both motivation and self-efficacy. Their qualitative findings further revealed that successful presenters consistently engaged in repeated rehearsal, refinement, and sustained preparation, behaviours that closely reflect perseverance of effort. Wei et al. (2019) likewise validated the L2 Grit Scale among Chinese learners and demonstrated that grit was associated with multilingual experience, L2 enjoyment, and other affective resources that support speaking performance. A closer examination of these studies suggests that perseverance of effort consistently contributes to oral communication outcomes, whereas the influence of consistency of interest appears more variable and may depend on learners' motivational beliefs and emotional experiences.

The third strand considers grit as a psychological construct that can be strengthened through instructional practices rather than viewed solely as a relatively stable learner characteristic. Hwang et al. (2024) demonstrated that technology-mediated speaking activities improved not only learners' fluency and accuracy but also their grit and enjoyment. These findings challenge the traditional view of grit as a fixed

learner characteristic and instead suggest that supportive learning environments may contribute to its development. Nevertheless, the extent to which grit can be cultivated remains an ongoing area of discussion, indicating that instructional practices and contextual factors may play an important role in shaping learners' perseverance during oral communication tasks.

Collectively, the current literature demonstrates that grit plays an important role in oral communication by enabling learners to persist despite communicative challenges, sustain repeated practice, and remain engaged throughout the learning process. At the same time, the literature consistently shows that perseverance of effort contributes more strongly to oral communication outcomes than consistency of interest, echoing the broader debates surrounding grit's dimensionality discussed in the previous section. However, much of the existing research has focused on willingness to communicate, speaking proficiency, or general oral communication rather than oral presentations. Although these contexts share similar communicative demands, oral presentations require students to repeatedly rehearse, respond to evaluative feedback, organise multimodal content, and sustain their performance under audience scrutiny. These distinctive characteristics suggest that the psychological processes underpinning grit may operate differently in oral presentation contexts. Given that grit has consistently been associated with sustained effort and persistence in oral communication, it is important to understand the psychological mechanisms through which these behaviours are sustained. One potential mechanism is intrinsic motivation, which has consistently been associated with learners' sustained engagement and persistence in learning. The following section therefore reviews the relationship between grit and intrinsic motivation.

2.8.2 Relationship between Grit and Intrinsic Motivation

The previous section highlighted that grit enables learners to sustain effort despite repeated communicative challenges, persist through setbacks, and remain engaged in oral communication tasks. However, sustaining such effort requires more than perseverance alone. Students must also possess the internal drive to continue investing effort despite repeated practice, criticism, and performance pressure. This internal drive is reflected in intrinsic motivation, which refers to engaging in learning activities out of genuine interest and personal satisfaction rather than external rewards

or pressures. Consequently, it is theoretically plausible that learners who demonstrate higher levels of grit are also more likely to develop stronger intrinsic motivation. This proposition is examined through the following discussion.

Empirical evidence increasingly supports this theoretical proposition. Across different educational settings, students who demonstrate greater perseverance and sustained commitment towards long-term learning goals consistently report higher levels of intrinsic motivation. For example, Song (2024) reported that grit directly predicted sustained motivation among EFL learners. Similarly, Lee and Park (2024) found that both perseverance of effort and consistency of interest were positively associated with intrinsic motivation among preservice physical education teachers. Their findings further revealed that this relationship was explained through mastery-approach goals, as gritty learners were more likely to pursue personal growth and mastery, which subsequently strengthened their intrinsic motivation. Likewise, Feng and Papi (2020) demonstrated that perseverance of effort, together with future goals and self-belief, significantly enhanced learners' intrinsic motivation. Although these studies were conducted across different educational contexts, they converge on a common finding: learners who demonstrate greater perseverance and sustained commitment towards long-term goals are more likely to develop stronger intrinsic motivation. Importantly, this relationship appears to be facilitated by learners' orientation towards mastery, personal growth, and meaningful engagement with learning rather than persistence alone.

An important pattern emerging from these studies is that perseverance of effort appears to demonstrate a more consistent relationship with intrinsic motivation than consistency of interest. While Lee and Park (2024) reported positive associations for both dimensions, Feng and Papi (2020) primarily highlighted the role of perseverance of effort in strengthening learners' intrinsic motivation. Collectively, these findings suggest that perseverance of effort may function as the stronger driver of intrinsic motivation because it enables learners to persist despite setbacks and experience repeated mastery, which reinforces their internal desire to learn. Nevertheless, the present study conceptualises grit as a higher-order construct comprising both perseverance of effort and consistency of interest, consistent with Duckworth et al. (2007). Accordingly, the proposed relationship is examined at the construct level rather than at the level of the individual sub-dimensions.

Earlier evidence also supports this relationship, although the studies differ in their methodological rigour and educational contexts. Giordano (2019) found a moderate positive correlation between grit and intrinsic motivation among Japanese university students learning foreign languages. Although the study was constrained by a relatively small sample and limitations in instrument reliability, it provided early empirical support for the association between grit and intrinsic motivation and highlighted the need for further investigation using more robust research designs. More recently, Chuented et al. (2023) demonstrated strong positive correlations between grit and intrinsic motivation among Thai medical residents, with perseverance of effort significantly associated with the satisfaction of autonomy, competence, and relatedness. Their mixed-methods findings further revealed that supportive learning environments promoted both grit and intrinsic motivation, providing empirical support for the central propositions of Self-Determination Theory.

From the perspective of Self-Determination Theory, this relationship can be understood through the satisfaction of learners' basic psychological needs, particularly competence. Students who demonstrate grit are more likely to persist through learning challenges, engage in repeated practice, and recognise their own progress despite setbacks. These mastery experiences strengthen learners' sense of competence, which subsequently enhances their intrinsic motivation to continue learning. Rather than viewing grit and intrinsic motivation as independent psychological constructs, SDT suggests that sustained perseverance may create the conditions through which intrinsic motivation develops and is maintained over time.

Collectively, the current literature provides encouraging evidence that grit contributes to the development of intrinsic motivation. However, most existing studies have examined this relationship within general educational or second language learning contexts. Comparatively little is known about whether this relationship also holds in oral presentation contexts, where students must repeatedly rehearse, respond to evaluative feedback, and sustain their motivation despite performance pressure. Given these distinctive demands, understanding how grit contributes to intrinsic motivation is particularly important in explaining students' engagement with oral presentation tasks. Addressing this gap, the present study examines the influence of grit on intrinsic motivation in oral presentation contexts. Accordingly, the following hypothesis is proposed:

H3: Grit significantly influences intrinsic motivation.

2.8.3 Grit as a Mediator

The previous sections established that students with stronger feedback literacy are more likely to engage constructively with feedback, while learners with higher levels of grit are more likely to demonstrate stronger intrinsic motivation (Song, 2024; Lee & Park, 2024; Feng & Papi, 2020). Viewed together, these findings suggest that grit may function as an important psychological mechanism linking feedback literacy and intrinsic motivation. This proposition is particularly relevant in oral presentation contexts, where students are required to repeatedly interpret and implement feedback, refine both their content and delivery, and sustain their effort throughout repeated rehearsal despite evaluative pressure. While feedback literacy enables students to engage productively with feedback, maintaining this engagement over repeated cycles of practice requires the perseverance and sustained commitment reflected in grit. This suggests that grit may explain how productive engagement with feedback is translated into sustained intrinsic motivation.

Recent empirical evidence has increasingly positioned grit as a potential mediating construct within motivational processes. Gao et al. (2024), for example, found that L2 grit mediated the relationship between teacher support and student engagement, demonstrating that supportive learning environments promoted students' perseverance and passion, which subsequently enhanced their engagement in language learning. Similarly, Noughabi and Ghasemi (2024) reported that grit fully mediated the relationship between informal digital learning of English and willingness to communicate among Iranian EFL learners. Their findings further suggest that grit may operate as an important psychological mechanism linking learning experiences with oral communication outcomes. Although these studies examined different antecedents and outcomes, they converge on the view that grit helps explain how supportive learning experiences are translated into positive motivational and behavioural outcomes.

Further support can be inferred from studies examining the relationship between grit and feedback-related behaviours. Zhang and Jiang (2025) found that gritty students were more likely to monitor feedback and seek clarification from their teachers, suggesting that learners with greater perseverance are also more willing to engage actively with feedback. Although the study did not examine feedback literacy directly, these findings provide indirect support for the proposition that productive engagement

with feedback may contribute to the development of grit, which subsequently influences learners' motivation.

Nevertheless, the empirical evidence remains mixed. Bai and Hu (2025) found that grit did not mediate the relationship between foreign language enjoyment and willingness to communicate, with academic buoyancy emerging as the more influential mediator instead. Likewise, Usher et al. (2019) reported that their time-lagged analyses provided insufficient evidence to support grit as a mediator of academic success. Rather than dismissing grit as an ineffective mediator, these findings suggest that its mediating role may depend on the educational context, the learning outcomes examined, and the psychological processes incorporated within the proposed model.

From the perspective of Self-Determination Theory (Ryan & Deci, 2020), grit provides a theoretically meaningful explanation for how feedback literacy may contribute to intrinsic motivation. Students with stronger feedback literacy are more likely to interpret, evaluate, and act upon feedback constructively (Molloy et al., 2019). In oral presentation contexts, this requires students to repeatedly implement feedback, refine both their content and delivery, and continue rehearsing despite mistakes and evaluative pressure (Radzuan et al., 2023; Tsang, 2020). Through these repeated cycles of improvement, students develop the perseverance and sustained commitment reflected in grit while simultaneously strengthening their sense of competence as they recognise their own progress. These mastery experiences subsequently reinforce their intrinsic motivation to continue improving. Viewed from this perspective, grit represents the psychological mechanism through which productive engagement with feedback may be translated into sustained intrinsic motivation.

Collectively, the current literature provides encouraging theoretical and empirical support for positioning grit as a mediator. However, no study has directly examined grit as a mediator between feedback literacy and intrinsic motivation, particularly within oral presentation contexts. Oral presentations require students not only to interpret and implement feedback but also to persist through repeated rehearsal, refine both their content and delivery, and continue improving despite mistakes and evaluative pressure (Radzuan et al., 2023; Tsang, 2020). Students with stronger feedback literacy are more likely to engage productively with feedback, yet sustaining this engagement throughout repeated cycles of practice requires the perseverance and sustained commitment reflected in grit. These qualities enable students to maintain their effort despite setbacks while reinforcing their intrinsic motivation to continue

improving. Consequently, grit represents a particularly relevant psychological mechanism through which feedback literacy may contribute to intrinsic motivation within oral presentation contexts. Addressing this gap, the present study proposes the following hypothesis:

H6: Grit mediates the relationship between feedback literacy and intrinsic motivation.

2.9 Intrinsic Motivation

Self-Determination Theory (SDT) conceptualises motivation along a continuum of self-determination, ranging from highly autonomous to controlled forms of regulation (Gagné & Deci, 2005; Howard et al., 2017; Ryan & Deci, 2017). At the most autonomous end of this continuum lies intrinsic motivation (Malone & Lepper, 2021), which refers to engaging in learning because the activity itself is inherently enjoyable, interesting, or personally satisfying (Fishbach & Woolley, 2021; Lindenberg, 2001; Morris et al., 2022). This contrasts with extrinsic motivation, where learners participate primarily to obtain external rewards, avoid punishment, or gain social approval (Deci & Ryan, 1985).

Within SDT, extrinsic motivation varies according to the degree to which it is internalised. External regulation represents the least autonomous form of motivation, where behaviour is driven by external demands or rewards. Introjected regulation reflects a partially internalised form, characterised by internal pressures such as pride, guilt, or shame (Castonguay et al., 2015). Identified regulation represents a higher degree of self-determination, as learners willingly engage in activities that they perceive as personally valuable (Burton et al., 2006; Ha et al., 2024). At the highest level of internalisation, integrated regulation occurs when behaviours are fully aligned with an individual's values and identity, although this form is less commonly observed among younger learners (Gagné & Deci, 2005; Vallerand et al., 1992). Accordingly, SDT classifies intrinsic motivation and identified regulation as autonomous forms of motivation, whereas introjected and external regulation are regarded as controlled forms (Gagné & Deci, 2005; Ryan & Deci, 2000). In contrast, amotivation reflects the absence of intentional behaviour when learners perceive little value, competence, or control over their learning (Legault et al., 2006). These distinctions position intrinsic motivation as

the most self-determined form of motivation, one that is consistently associated with meaningful and sustained engagement in learning.

According to SDT, intrinsic motivation flourishes when learners' three basic psychological needs for autonomy, competence, and relatedness are satisfied (Ryan & Deci, 2000, 2020), as illustrated in Figure 2.2. Autonomy refers to the experience of volition and psychological freedom in one's actions, where learners perceive themselves as the origin of their behaviour. Competence reflects learners' perceptions of effectiveness in mastering challenges and achieving desired outcomes, while relatedness captures the sense of belonging and meaningful connection with significant others, including teachers and peers (Baumeister & Leary, 1995; González-Arias et al., 2025; Niemiec & Ryan, 2009). Research consistently shows that environments supporting these psychological needs not only strengthen intrinsic motivation but also facilitate the internalisation of extrinsic motivation, enabling learners to regulate their behaviour more autonomously (Gagné & Deci, 2005; Ryan & Deci, 2020).

A closer examination of the literature reveals consistency regarding the educational benefits of intrinsic motivation. Across different educational levels, disciplines, and cultural contexts, intrinsically motivated learners consistently demonstrate greater persistence, deeper engagement, stronger self-regulation, and higher academic achievement than learners who rely primarily on controlled forms of motivation (Cerasoli et al., 2014; Howard et al., 2021; Ryan & Deci, 2020; Van den Broeck et al., 2021). These findings have also been supported by studies showing that intrinsic motivation promotes positive academic emotions, adaptive learning strategies, and meaningful participation in learning activities (Deci & Ryan, 1985; Noels et al., 2000; Reeve, 2012; Ryan & Deci, 2017; Vansteenkiste et al., 2005). Collectively, this body of evidence positions intrinsic motivation as one of the most robust psychological resources underpinning meaningful learning.

Nevertheless, the role of intrinsic motivation has not been without debate. Some scholars argue that intrinsic and extrinsic motivation should not be viewed as competing constructs but rather as complementary forms of motivation that jointly contribute to competence development and learning outcomes (Anselme & Hidi, 2024; Covington, 2000; Diseth et al., 2020; Rahmi & Neviyarni, 2022; Serin, 2018). In contrast, proponents of SDT maintain that autonomous forms of motivation, particularly intrinsic motivation, provide a more sustainable foundation for long-term engagement because learners participate out of genuine interest rather than external contingencies (Fishbach

& Woolley, 2021; Hennessey et al., 2014; Moore, 2022; Ryan et al., 2021; Zhou, 2025). Rather than viewing these perspectives as contradictory, they suggest that while both forms of motivation may facilitate learning, intrinsic motivation is more likely to sustain learners' engagement once external incentives are removed. Given that the present study seeks to understand students' sustained engagement in oral presentation tasks, intrinsic motivation is considered the most appropriate construct to underpin the proposed framework.

Building on this conceptual foundation, the following section reviews how intrinsic motivation has been examined in oral communication contexts and discusses its relevance to oral presentation competence.

2.9.1 Intrinsic Motivation in Oral Communication

The previous section established intrinsic motivation as the most autonomous form of motivation within Self-Determination Theory. Building on this conceptual foundation, researchers have increasingly examined the role of intrinsic motivation in language learning and oral communication contexts. Oral communication requires learners not only to possess linguistic competence but also to participate voluntarily, persist despite communication anxiety, and remain engaged throughout communicative interactions. These demands suggest that intrinsic motivation may play an important role in encouraging students to communicate confidently and sustain their engagement in oral communication tasks.

Existing research can be broadly organised into three interconnected strands. The first examines the influence of intrinsic motivation on learners' willingness to communicate, confidence, and engagement. Foundational perspectives within Self-Determination Theory propose that learners who participate out of genuine interest and enjoyment are more likely to demonstrate persistence and confidence during learning (Ryan & Deci, 1985, 2000). Similarly, Noels et al. (2000) found that intrinsically motivated language learners sustained higher levels of enjoyment and persistence in communicative activities, while Ushioda (2011) argued that learners' identities and personal goals played an important role in sustaining their willingness to communicate in authentic language-learning contexts. Collectively, these studies suggest that intrinsic motivation provides an important psychological foundation for learners' willingness to participate actively in oral communication. However, these foundational studies

primarily examined general language learning and willingness to communicate rather than oral presentations. Consequently, they provide only indirect evidence for understanding how intrinsic motivation operates in performance-based oral communication tasks.

The second strand focuses on the contribution of intrinsic motivation to oral communication and presentation performance. Zhang (2024) reported that intrinsic motivation was positively associated with autonomous learning, teacher-supported autonomy, classroom participation, and oral performance among EFL learners while simultaneously reducing speaking anxiety. Likewise, Liang and Kelsen (2018) found that inquiry-based learning enhanced students' intrinsic motivation, particularly among extraverted learners, which subsequently improved their oral presentation performance. Suliman (2022) similarly reported that presentation tasks promoted learner autonomy, confidence, and motivation when students were provided with opportunities to make meaningful choices throughout the preparation process. Another observation emerging from these studies is that intrinsic motivation is frequently examined alongside related constructs such as learner autonomy, classroom participation, and speaking anxiety. While this reflects the multifaceted nature of oral communication, it also makes it difficult to determine the unique contribution of intrinsic motivation to oral presentation performance. Nevertheless, these studies consistently suggest that intrinsically motivated learners are more likely to invest effort in preparing their presentations, experience lower communication anxiety, and demonstrate greater confidence during presentation delivery.

The third strand highlights the broader psychological mechanisms through which intrinsic motivation supports oral communication. Moyano et al. (2020) demonstrated that intrinsic motivation, together with self-esteem, predicted academic achievement through verbal fluency and reasoning, emphasising the interaction between motivational and cognitive processes. Likewise, Lemana et al. (2023) found that intrinsically motivated learners perceived oral communication as enjoyable and meaningful, thereby creating more authentic opportunities to use the target language. Borkowska (2022) further showed that intrinsic motivation was the strongest predictor of in-class willingness to communicate, particularly when learning environments were characterised by empathy, patience, and supportive instructional practices. A closer examination of these studies suggests that intrinsic motivation rarely operates in isolation. Rather, its influence appears to be strengthened by other learner and

contextual factors, including self-esteem, supportive learning environments, and verbal ability. This suggests that while intrinsic motivation contributes meaningfully to oral communication, its effects may depend on interactions with other psychological and instructional variables.

Despite these encouraging findings, several observations emerge from the current literature. First, intrinsic motivation consistently contributes to learners' willingness to communicate, confidence, and persistence across different oral communication contexts. Second, supportive learning environments appear to strengthen the influence of intrinsic motivation by creating conditions that encourage learners to participate more actively in communicative tasks. However, much of the existing literature has focused on willingness to communicate, speaking performance, or general oral communication rather than oral presentations specifically. Although these contexts share similar communicative demands, oral presentations require students to sustain their motivation throughout repeated rehearsal, organise multimodal content, respond to evaluative feedback, and perform under audience scrutiny. These distinctive demands suggest that intrinsic motivation may play an even more important role in oral presentation contexts. Consequently, further research is needed to understand how intrinsic motivation contributes to students' oral presentation competence.

2.9.2 Relationship between Intrinsic Motivation and Oral Presentation Competence

Building on the preceding discussion, this study proposes that intrinsic motivation directly influences students' oral presentation competence. Within Self-Determination Theory, intrinsic motivation is regarded as a key psychological resource that energises learners to engage actively in learning, persist despite challenges, and regulate their emotions throughout demanding learning tasks (Cronin et al., 2020; Rad et al., 2024). These qualities are particularly important in oral presentations, which require sustained preparation, repeated rehearsal, confidence during delivery, and the ability to respond effectively under evaluative pressure. Consequently, students who are intrinsically motivated may be better positioned to develop stronger oral presentation competence.

Previous research provides encouraging, albeit largely indirect, evidence supporting this proposition. Paloș et al. (2025) found that intrinsic motivation, characterised by curiosity and enjoyment, was positively associated with deep learning strategies, suggesting that intrinsically motivated learners invest greater cognitive effort in overcoming learning challenges. Likewise, Hernández et al. (2022) reported that intrinsic motivation predicted students' perceived professional competence, particularly when their needs for autonomy and competence were supported within the learning environment. Although these studies did not examine oral presentation competence directly, they highlight important psychological mechanisms, including sustained effort, confidence, and cognitive engagement, that are essential for effective oral presentations.

Evidence from oral communication research further supports the contribution of intrinsic motivation to presentation performance. Liang and Kelsen (2018) found that motivation predicted students' oral presentation performance, although extrinsic motivation demonstrated a stronger influence than intrinsic motivation within their sample. Similarly, Bolívar-Cruz and Verano-Tacoronte (2018) reported that students with greater public speaking confidence performed better in oral assessments, highlighting the importance of learners' internal motivational states during presentation tasks. Although these findings are encouraging, they also suggest that intrinsic motivation may operate alongside other motivational factors rather than functioning independently in determining presentation performance.

Collectively, the current literature indicates that intrinsic motivation contributes to greater engagement, confidence, and sustained effort, all of which are important characteristics for successful oral presentations. Nevertheless, empirical evidence directly examining the influence of intrinsic motivation on oral presentation competence remains limited. Most previous studies have focused on broader academic outcomes, speaking performance, or presentation-related variables such as confidence rather than conceptualising oral presentation competence as a multidimensional construct encompassing presentation content, multimodal competence, and professionalism. Consequently, further investigation is needed to determine the extent to which intrinsic motivation directly influences oral presentation competence. Addressing this gap, the present study proposes the following hypothesis:

H4: Intrinsic motivation significantly influences oral presentation competence.

2.9.3 Intrinsic Motivation as a Mediator

The preceding discussion focused on the direct influence of intrinsic motivation on oral presentation competence. However, recent research suggests that intrinsic motivation may also function as an important psychological mechanism through which learners' psychological resources are translated into positive educational outcomes. This perspective is consistent with Self-Determination Theory (SDT), which proposes that supportive psychological experiences foster intrinsic motivation, thereby promoting learners' engagement, persistence, and performance. Building on this perspective, the following discussion reviews the empirical evidence supporting the mediating role of intrinsic motivation.

Recent empirical evidence increasingly positions intrinsic motivation as an important mediating construct between supportive learning experiences and positive educational outcomes. Li et al. (2022) found that autonomy-supportive teaching fostered intrinsic motivation, which subsequently predicted student engagement in online learning. Similarly, Shin and Bolkan (2020) reported that intellectually stimulating teaching behaviours promoted intrinsic motivation both directly and indirectly by enhancing students' engagement, self-efficacy, and peer support. Likewise, Tokan and Imakulata (2019) demonstrated that intrinsic motivation, together with extrinsic motivation, predicted learning achievement through its influence on students' learning behaviour. Although these studies examined different educational contexts and outcomes, they consistently suggest that intrinsic motivation functions as an important psychological mechanism through which supportive learning experiences are translated into positive educational outcomes.

From the perspective of Self-Determination Theory (Ryan & Deci, 2000, 2020), this mediating role can be understood through the satisfaction of learners' basic psychological needs, particularly competence. Students who demonstrate greater perseverance are more likely to sustain their effort despite repeated challenges, recognise their own progress, and experience increasing competence throughout the learning process. These mastery experiences strengthen their intrinsic motivation, encouraging them to continue investing effort in preparing, rehearsing, and refining their presentations despite evaluative pressure. As a result, this heightened motivational state is expected to contribute to stronger oral presentation competence. Viewed from

this perspective, intrinsic motivation explains how the perseverance reflected in grit is translated into effective oral presentation competence.

Nevertheless, empirical evidence directly examining intrinsic motivation as a mediator between grit and oral presentation competence remains limited. Most previous studies have examined intrinsic motivation as a mediator between teaching practices and general learning outcomes rather than as the mechanism linking learners' psychological characteristics to oral presentation competence. This limitation is particularly evident in oral presentation contexts, where students must sustain their motivation throughout repeated rehearsal, respond constructively to feedback, regulate performance anxiety, and perform confidently under audience scrutiny. These distinctive demands suggest that intrinsic motivation may play an important mediating role in translating students' perseverance into effective oral presentation performance. Addressing this gap, the present study proposes the following hypothesis:

H7: Intrinsic motivation mediates the relationship between grit and oral presentation competence.

2.10 Systematic Literature Review Procedures

The preceding sections reviewed the literature relating to each construct and discussed the empirical evidence supporting the proposed sequential and mediated relationships. While these discussions established the theoretical and empirical basis of each hypothesis, they were presented according to individual relationships. Therefore, a systematic literature review (SLR) was conducted to synthesise the evidence collectively and ensure that the proposed hypotheses and conceptual framework were developed based on a comprehensive and transparent review of the literature rather than selective citation.

The SLR focused on the seven hypothesised relationships proposed in this study, comprising four sequential relationships, namely perceived autonomy support–feedback literacy, feedback literacy-grit, grit-intrinsic motivation, and intrinsic motivation-oral presentation competence, as well as the three proposed mediated relationships involving feedback literacy, grit, and intrinsic motivation as potential mediators. Examining these relationships collectively enabled the present study to determine whether the proposed model was consistently supported in previous research,

identify areas where empirical evidence remained limited, and establish the research gaps that justify the proposed conceptual framework.

The review followed the three-stage procedure recommended by Okoli (2015) and Xiao and Watson (2019), namely identification of sources, screening of records, and eligibility assessment. Figure 2.2 illustrates the systematic literature retrieval process, while the following subsections describe each stage of the review.

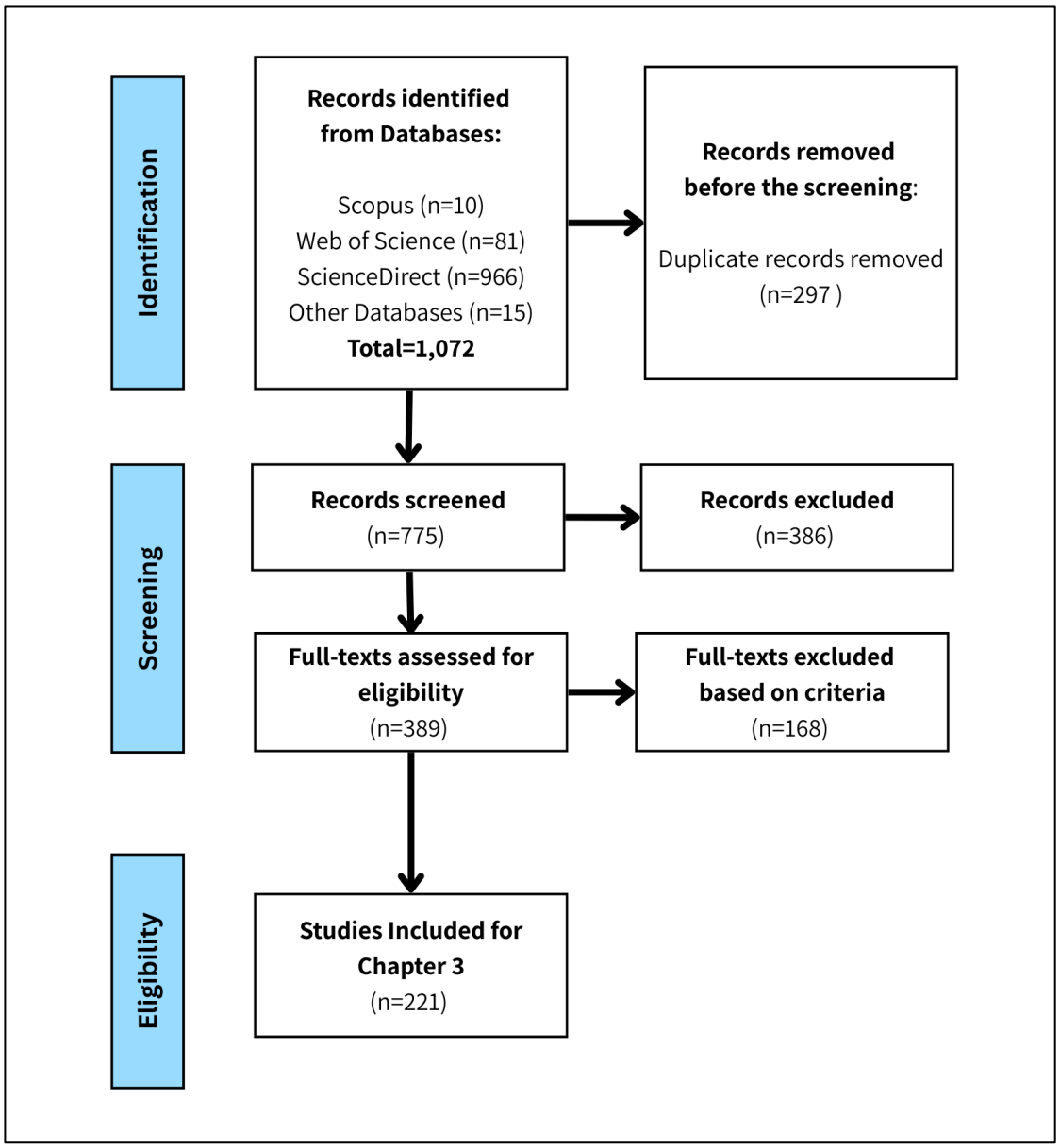


Figure 2.2 Systematic Literature Retrieval for Hypotheses Development

2.10.1 Identification of Sources

The identification stage involved selecting appropriate databases and developing search strategies for each of the seven hypothesised relationships proposed in this study. As the present study examines four sequential and three mediated relationships, separate search strategies were developed to ensure that empirical evidence relevant to each hypothesis was systematically identified. Search terms were generated using academic thesauri, previous empirical studies, and database-suggested keywords. Synonyms and related expressions were incorporated to improve search sensitivity, while Boolean operators, phrase searching, truncation, and field-specific filters were applied to increase retrieval precision. The search strings were subsequently adapted to the syntax requirements of each database.

Three primary databases, namely Scopus, Web of Science, and ScienceDirect, were selected because they provide extensive coverage of peer-reviewed literature across education, psychology, and applied linguistics, the three disciplines underpinning the present study (Gusenbauer & Haddaway, 2020; Martín-Martín et al., 2018). Scopus and Web of Science were prioritised due to their rigorous indexing standards, multidisciplinary coverage, and citation tracking capabilities, whereas ScienceDirect was included to facilitate access to full-text empirical studies that may not be indexed comprehensively in the other databases. Supplementary searches were also conducted through Google Scholar, ResearchGate, MyJurnal, institutional repositories, and manual snowballing of reference lists, as recommended by Xiao and Watson (2019) to minimise publication bias and improve retrieval completeness.

The literature search yielded 1,072 records. Following the removal of 297 duplicate records, 775 unique records remained for the screening stage. The complete search strings developed for each hypothesised relationship are presented in Appendix A, while Table 2.1 summarises the keywords and Boolean operators used in the literature search. These records formed the initial evidence base that was subsequently screened to determine their relevance to the proposed hypotheses and research objectives.

Table 2.1
Keywords and Boolean Operators for Hypotheses Literature Search

Hypothesis	Search Terms/Keywords	Boolean Operators
Hypothesis 1 Perceived Autonomy Support -> Feedback Literacy	autonomy support" OR "perceived autonomy support"; "feedback literacy" OR "feedback engagement"	("autonomy support" OR "perceived autonomy support") AND ("feedback literacy" OR "feedback engagement")
Hypothesis 2 Feedback Literacy -> Grit	"feedback literacy" OR "feedback engagement"; "grit" OR "perseverance"	("feedback literacy" OR "feedback engagement") AND ("grit" OR "perseverance")
Hypothesis 3 Girt -> Intrinsic Motivation	"grit" OR "perseverance"; "intrinsic motivation" OR "self-determined motivation"	("grit" OR "perseverance") AND ("intrinsic motivation" OR "self-determined motivation")
Hypothesis 4 Intrinsic Motivation -> Oral Presentation Competence	"intrinsic motivation" OR "internal motivation"; "oral presentation competence" OR "presentation skills" OR "public speaking performance"	("intrinsic motivation" OR "internal motivation") AND ("oral presentation competence" OR "presentation skills" OR "public speaking performance")
Hypothesis 5 Mediation of Feedback Literacy between Perceived Autonomy Support and Grit	"autonomy support" OR "perceived autonomy support"; "feedback literacy" OR "feedback engagement"; "grit" OR "perseverance"; "mediation" OR "mediating role"	("autonomy support" OR "perceived autonomy support") AND ("feedback literacy" OR "feedback engagement") AND ("grit" OR "perseverance") AND ("mediation" OR "mediating role")
Hypothesis 6 Mediation of Grit between Feedback Literacy and Intrinsic Motivation	"feedback literacy" OR "feedback engagement"; "grit" OR "perseverance"; "intrinsic motivation"; "mediation" OR "mediating role"	("feedback literacy" OR "feedback engagement") AND ("grit" OR "perseverance") AND ("intrinsic motivation") AND ("mediation" OR "mediating role")
Hypothesis 7 Mediation of Intrinsic Motivation between Grit and Oral Presentation Competence	"grit" OR "perseverance"; "intrinsic motivation"; "oral presentation competence" OR "presentation skills"; "mediation" OR "mediating role"	("grit" OR "perseverance") AND ("intrinsic motivation") AND ("oral presentation competence" OR "presentation skills") AND ("mediation" OR "mediating role")

2.10.2 Screening of Records

Following the identification stage, all retrieved records underwent a screening process to determine their relevance to the objectives of the present study. This stage involved applying predefined inclusion and exclusion criteria to ensure that only studies capable of informing the proposed hypotheses were retained for further evaluation. Applying these criteria systematically enhanced the consistency, transparency, and quality of the review while reducing the inclusion of studies that fell outside the scope of the research.

The initial search across the selected databases and supplementary sources yielded 775 unique records after duplicate removal. These records were screened at the title and abstract level using the inclusion and exclusion criteria presented in Table 2.2. Studies were included if they were published between 2018 and 2025, written in English, available in full-text format, and reported empirical findings through journal articles, review articles, books, book chapters, or conference proceedings. Conversely, conceptual papers, opinion articles, newspapers, encyclopaedias, and publications that were not available in full text were excluded.

The review period was restricted to publications between 2018 and 2025 to ensure that the proposed hypotheses were informed by recent empirical developments across the five constructs investigated. Although perceived autonomy support, intrinsic motivation, and oral presentation competence have long been established in educational research, feedback literacy and grit are comparatively newer constructs that have gained increasing scholarly attention in recent years. Restricting the review to this timeframe therefore enabled the present study to capture current empirical evidence while allowing seminal studies published before 2018 to continue informing the theoretical discussions presented earlier in this chapter.

The inclusion and exclusion criteria were further guided by the need to ensure both methodological rigour and relevance. Only English-language publications were included to maintain consistency in coding and interpretation, while full-text articles were prioritised to enable a comprehensive evaluation of the research design, methodology, and findings. Empirical studies were also prioritised because the purpose of the review was to establish evidence supporting the proposed sequential and mediated relationships rather than to synthesise theoretical or conceptual perspectives.

Table 2.2
Inclusion and Exclusion Criteria

Criteria	Inclusion Criteria	Exclusion Criteria
Timeline	Publications dated between 2018 and 2025	Publications dated before 2018
Publication Type	Empirical journal articles, review articles, book, book chapters, conference proceedings	Newspapers, opinion pieces, theoretical essays, conceptual articles, encyclopaedias
Language	Articles published in English	Articles published in languages other than English
Accessibility	Full-text available through institutional access or open source	Abstract-only articles or those inaccessible despite retrieval effort

Following the screening process, 554 records were excluded because they did not satisfy the inclusion criteria or lacked empirical evidence relevant to the proposed hypotheses. The remaining 221 articles progressed to the full-text eligibility assessment as elaborated in the next section.

2.10.3 Eligibility Assessment

The eligibility stage involved a full-text evaluation of the 389 records that had passed the screening stage. This stage ensured that the retained studies not only satisfied the inclusion criteria but also provided empirical evidence relevant to one or more of the hypothesised relationships proposed in the present study. A full-text assessment was necessary because the relevance and methodological quality of some studies could not be adequately determined based solely on their titles and abstracts.

During the eligibility assessment, articles were excluded if they were duplicate publications that had not been identified previously, published in languages other than English, or released as early-access manuscripts without completed peer review. After applying these criteria, all 221 articles were confirmed eligible and retained for the final synthesis.

The retained studies were subsequently organised according to the seven hypothesised relationships proposed in this study. Specifically, the studies were synthesised based on the four proposed sequential relationships, namely perceived

autonomy support-feedback literacy, feedback literacy-grit, grit-intrinsic motivation, and intrinsic motivation-oral presentation competence, as well as the three proposed mediated relationships involving feedback literacy, grit, and intrinsic motivation. Organising the studies according to the hypothesised relationships enabled the findings to be synthesised systematically and ensured that the proposed hypotheses were supported by a comprehensive review of the available empirical evidence.

The synthesis of these studies also enabled the identification of recurring patterns, inconsistencies, and areas that remain underexplored in the literature. These observations subsequently informed the research gaps presented in the following section.

2.10.4 Research Gaps

The systematic literature review showed that empirical evidence generally supports the proposed sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. However, the review also identified several gaps that provide the rationale for the present study.

First, previous studies have primarily examined perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence as individual constructs or through separate relationships. Although these studies have contributed to understanding the role of each construct, limited studies have examined the proposed sequential and mediated relationships collectively within a single explanatory model. Consequently, there remains limited understanding of how these relationships explain oral presentation competence.

Second, while empirical evidence is available to support the proposed sequential relationships, comparatively fewer studies have examined the mediating relationships proposed in the present study. Specifically, limited studies have investigated feedback literacy as a mediator between perceived autonomy support and grit, grit as a mediator between feedback literacy and intrinsic motivation, and intrinsic motivation as a mediator between grit and oral presentation competence. As a result, the explanatory role of these mediating relationships remains underexplored within the existing literature.

Finally, although feedback literacy has received increasing attention in higher education research, it has primarily been examined as an independent construct of learning outcomes. Similarly, studies on oral presentation competence have largely focused on broader communication skills, language learning, or academic performance rather than oral presentation competence as a multidimensional construct. Furthermore, limited studies have examined the proposed sequential and mediated relationships within the context of Malaysian higher education. Consequently, there remains limited contextual evidence explaining these relationships among Malaysian undergraduates.

Overall, the findings of the systematic literature review indicate the need for a study that examines both the proposed sequential and mediated relationships within a single theoretical model of oral presentation competence. Addressing these gaps provides the rationale for the present study and supports the development of the proposed conceptual framework presented in the following section.

2.11 Proposed Conceptual Framework

Building upon the theoretical framework and the research gaps identified through the systematic literature review, the present study proposes a conceptual framework to explain the relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. The framework is grounded in Self-Determination Theory (Ryan & Deci, 2000, 2017), which explains how autonomy-supportive learning environments facilitate students' motivation and learning, while the Oral Presentation-Multimodal Framework (Radzuan et al., 2023) provides the conceptual basis for operationalising oral presentation competence as the outcome construct. The proposed framework was developed iteratively by integrating the theoretical propositions of Self-Determination Theory with the empirical evidence reviewed in the preceding sections. Accordingly, each proposed relationship is theoretically justified and empirically supported by previous research.

The proposed framework consists of four sequential relationships and three mediating relationships. First, perceived autonomy support is proposed to positively influence feedback literacy (H1). Feedback literacy is proposed to positively influence grit (H2), while grit is proposed to positively influence intrinsic motivation (H3). Finally, intrinsic motivation is hypothesised to positively influence oral presentation competence (H4).

Extending these sequential relationships, the framework further proposes three mediated relationships. Specifically, feedback literacy is expected to mediate the relationship between perceived autonomy support and grit (H5), grit is proposed to mediate the relationship between feedback literacy and intrinsic motivation (H6), and intrinsic motivation is expected to mediate the relationship between grit and oral presentation competence (H7). These mediated hypotheses extend the sequential relationships by examining the psychological mechanisms through which the proposed constructs influence one another.

The complete conceptual framework is illustrated in Figure 2.3 and is preliminarily referred to as the COMPASS Model (Competence in Oral Presentation through Motivation, Perceived Autonomy Support, Feedback Literacy, and Grit). By integrating perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence within a single theoretical framework, the model provides a comprehensive explanation of both the proposed sequential relationships and the mediated relationships underpinning oral presentation competence. The framework subsequently forms the basis for the research hypotheses examined in the present study.

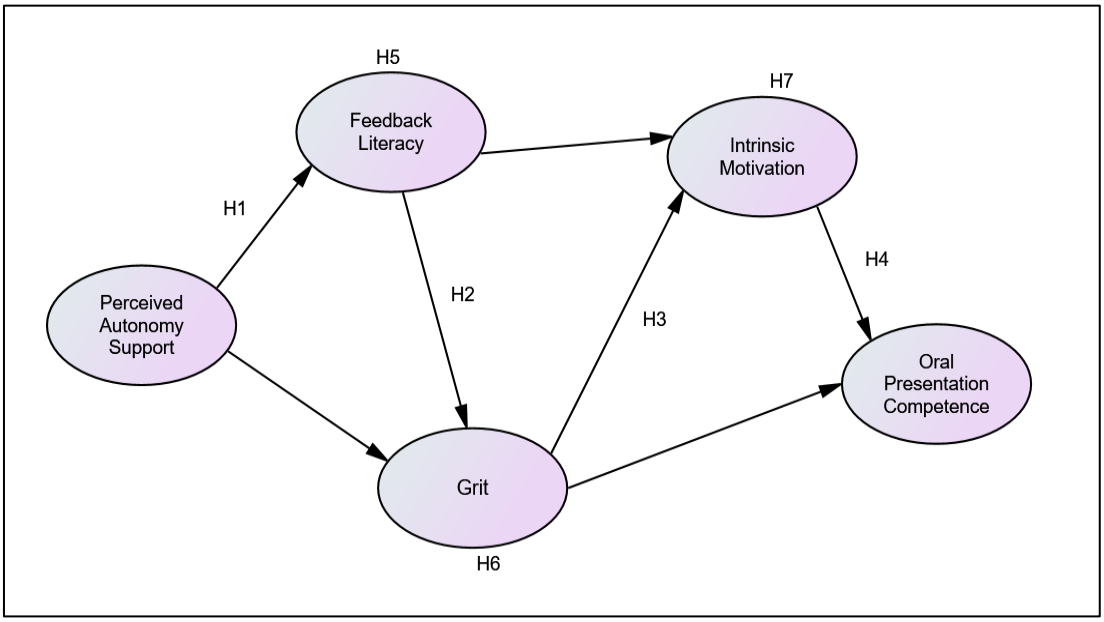


Figure 2.3 Conceptual Framework

2.12 Chapter Summary

This chapter reviewed the literature relevant to the present study. It began by discussing communicative competence models and oral presentation competence, followed by Self-Determination Theory and the Oral Presentation-Multimodal Framework, which guided the development of the proposed model. The literature on perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence was then reviewed to develop the four sequential hypotheses and three mediated hypotheses.

The chapter also presented the procedures of the systematic literature review, which synthesised empirical evidence relating to the proposed relationships and identified the research gaps addressed by the present study. Based on these findings, the proposed conceptual framework was developed to explain the relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence.

Having reviewed the relevant literature and developed the proposed conceptual framework, the following chapter describes the research methodology adopted to examine the proposed model and test the seven research hypotheses.

CHAPTER 3
METHODOLOGY

3.1 Introduction

This chapter explains the research methodology adopted in this study which seeks to investigate the relationships between perceived autonomy support, feedback literacy, grit, and intrinsic motivation as factors of oral presentation competence. To achieve this objective, the chapter begins by establishing the research approach which includes the research paradigm, design, and method for the present study. This is followed by a systematic description of the sampling procedures including the unit of analysis, population, sampling strategy, and sample size determination to ensure representativeness. The final section outlines the data collection and analysis procedures and highlights the statistical techniques employed for the main dataset. Collectively, this chapter provides a structured and rigorous methodological framework in achieving the research objective.

3.2 Methodological Framework

This section outlines the methodological framework adopted in the present study. It begins with the philosophical paradigm underpinning the research, followed by the research approach, research design, and research method. Together, these components provide a guideline for addressing the research objectives.

3.2.1 Research Paradigm

A research paradigm is a fundamental component of any scholarly inquiry as it guides how researchers conceptualise, design, and interpret their studies (Brown & Dueñas, 2020). Introduced by Kuhn (1970), a paradigm is defined as a set of shared beliefs and practices that shape how researchers understand and investigate a phenomenon (Shrestha & Sharma, 2024). Creswell and Creswell (2018), drawing on Guba (1990), conceptualise a research paradigm as a worldview, defined as “a basic set

of beliefs that guide action" (p.17), and classify such worldviews into four categories: postpositivism, constructivism, transformative, and pragmatism.

Among these paradigms, positivism reflects a deterministic orientation which emphasises the identification and examination of relationships (Creswell & Creswell, 2018; Maksimović & Evtimov, 2023; Park et al., 2020). In contrast, constructivism explores subjective meanings and lived experiences accessed through qualitative inquiry (Pulla & Carter, 2018). Transformative paradigm links research with politics and the pursuit of social justice (Creswell & Creswell, 2018; Mertens, 2010), while pragmatism advocates methodological pluralism, integrating qualitative and quantitative strategies depending on the research problem (Kivunja & Kuyini, 2017).

This study adopts a postpositivist paradigm because its aim is to examine the relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. Consistent with postpositivist assumptions, these psychological constructs are conceptualised as latent variables that can be measured objectively through validated scales. Furthermore, the researcher maintains independence from the phenomenon under investigation, reflecting the postpositivist emphasis on objectivity and empirical testing. Although postpositivism has occasionally been critiqued for downplaying subjective experiences (Holliday & Macdonald, 2020), it acknowledges that knowledge is provisional and open to refinement through theory testing and empirical evidence (Carpiano & Daley, 2006). Therefore, the adoption of a postpositivist paradigm provides the philosophical foundation for the methodological decisions made in this study, including the use of a quantitative research approach, validated measurement instruments, probability sampling, and structural equation modelling to objectively examine the hypothesised relationships among the study variables. Having established the philosophical paradigm underpinning this study, the following section discusses the quantitative research approach adopted.

3.2.2 Research Approach

Research approach refers to the overall methodological orientation that guides a study from its underlying philosophical assumptions to the methods used for data collection, analysis, and interpretation (Taherdoost, 2022). It ensures coherence between the research paradigm, research design, and research methods employed to

address the research objectives. Creswell and Creswell (2018) categorise research approaches into three broad types: quantitative, qualitative, and mixed methods.

This study adopted a quantitative approach, consistent with the postpositivist paradigm underpinning the research. A quantitative approach is appropriate for studies that seek to objectively measure variables, test theory-driven hypotheses, and examine relationships among constructs using numerical data (Creswell & Creswell, 2018). In the present study, perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence were conceptualised as latent constructs that could be measured objectively through validated indicators. Accordingly, the quantitative approach enabled the empirical examination of the hypothesised relationships among these constructs while ensuring objectivity through standardised data collection, validated measurement instruments, and statistical analyses.

The adoption of a quantitative approach was appropriate because the primary objective of this study was to examine the relationships among psychological constructs and test theory-driven hypotheses rather than to explore participants' subjective experiences or construct meanings. Consequently, the quantitative approach provided the most appropriate methodological foundation for addressing the research objectives. Having established the research approach adopted in this study, the following section discusses the research design employed.

3.2.3 Research Design

A research design serves as the overall blueprint that structures the research process by specifying how data are collected, analysed, and interpreted to address the research questions and test the proposed hypotheses (Indu & Vidhukumar, 2020). Babbie (2021) emphasises that a well-defined research design ensures coherence between the research problem, data collection procedures, and analytical techniques, thereby enhancing the validity and rigour of the study.

This study employed a non-experimental correlational research design using a cross-sectional approach. A correlational design is appropriate for studies that seek to examine the relationships among variables without manipulating them or establishing causal effects (Creswell & Creswell, 2018). In the present study, the objective was to examine the relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence based on the proposed

theoretical framework. Therefore, a correlational design was considered appropriate for addressing the research objectives and testing the hypothesised relationships.

The study further adopted a cross-sectional approach, whereby data were collected from the target population at a single point in time. Cross-sectional studies are widely used in quantitative research because they provide an efficient and cost-effective means of examining relationships among variables and allow findings to be generalised when appropriate sampling procedures are employed (Lau & Kuziemsky, 2017; Rindfleisch et al., 2008; Spector, 2019). Accordingly, the cross-sectional approach was appropriate for examining the proposed relationships among the study variables within the specified timeframe.

Having established the research design adopted in this study, the following section describes the research method employed for data collection.

3.2.4 Research Method

Research method refers to the specific procedures or techniques employed to collect data in order to address the research objectives (Creswell & Creswell, 2018). Consistent with the quantitative research approach and correlational research design adopted in this study, data were collected using the survey method.

The survey method was appropriate because it enabled the efficient collection of numerical data from a relatively large sample of undergraduate students within a defined timeframe. Data were gathered using a structured questionnaire comprising closed-ended items adapted from validated instruments and measured using predetermined response scales. This approach ensured consistency in data collection while enhancing the reliability, comparability, and objectivity of participants' responses (Cohen et al., 2018).

Furthermore, the survey method was appropriate as it facilitated the collection of standardised data required to examine the hypothesised relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence using statistical analyses. Having established the research method adopted in this study, the following section describes the sampling procedures employed for the pilot and main studies.

3.3 Population and Sampling Procedures

Defining the population and selecting an appropriate sampling strategy are essential to ensuring the validity, reliability, and representativeness of the research findings. This study targeted full-time undergraduate students enrolled at a Malaysian public university, Universiti Teknologi MARA (UiTM), across four campuses in Selangor: Shah Alam, Puncak Alam, Puncak Perdana, and Sungai Buloh. These campuses were selected to capture diverse academic disciplines to ensure the representativeness of the findings on oral presentation competence.

Given the structured nature of course enrolment at UiTM, a two-stage probability sampling procedure was implemented. In the first stage, stratified random sampling was applied by selecting intact classes from four targeted courses, ensuring representation across academic clusters. In the second stage, simple random sampling was employed to select individual students from class lists, thus minimising selection bias and ensuring that each student had an equal probability of participation.

Sample size determination was guided by multiple criteria, including calculations using established online tools (e.g., Raosoft, StatTrek) and published recommendations for quantitative research (Hair et al., 2010; Kline, 2010). These benchmarks ensured that both the pilot study and the main fieldwork achieved sufficient statistical power for structural equation modelling.

The following sections detail the unit of analysis, population, and sample size determination procedures to demonstrate how representativeness and generalisability were ensured.

3.3.1 Unit of Analysis

Clearly defining and operationalising the unit of analysis is crucial for ensuring that the sample adequately represents the study population (Damşa & Jornet, 2021). In this study, the unit of analysis is an individual student as the constructs under investigation are individual-level psychological constructs. Previous studies demonstrate that these constructs vary significantly between individuals, making group-level analysis potentially difficult for capturing meaningful personal differences (Nesselroade et al., 2007; Saqr, 2024). Hence, an individual-level analysis was adopted in this study.

Based on this decision, the study focused on full-time undergraduate students at Universiti Teknologi MARA (UiTM), a Malaysian public university with over 30,000 students across multiple campuses and academic disciplines. As this study focuses on oral presentation competence, the population was narrowed to students enrolled in English language proficiency courses offered by the language faculty of the university. These students were drawn from three academic programme clusters: (1) science and technology, (2) social sciences and humanities, and (3) business and management. The following section outlines the sampling frame developed to ensure that students from these three clusters were sufficiently represented in the study.

3.3.2 Sampling Frame

A sampling frame was developed to operationalise the sampling process to ensure systematic and unbiased participant selection. West (2016) defines a sampling frame as a structured list of eligible units from the target population from which a sample is drawn. A sampling frame facilitates the selection process and ensures that each unit has a known probability of inclusion which allows for unbiased selection and improved generalisation (DiGaetano, 2013).

In consultation with the academic administration coordinator of the language faculty, four English courses with explicit emphasis on oral presentation were identified: English for Oral Presentations (ELC590), English for Informative Speech (LCC400), English for Oral Reporting (LCC402), and English for Persuasion (LCC600). These courses embed oral presentations as the core of their curriculum, with a minimum of 70% of total assessment weightage allocated to oral presentation components (see Table 3.1). This substantial emphasis aligns with the principle of constructive alignment, whereby teaching activities and assessments are closely matched to intended learning outcomes (refer to Appendix 2) (Biggs, 1996; Pereira et al., 2024). Consequently, these courses provide a valid and pedagogically grounded context for examining oral presentation competence.

Table 3.1
Weightage Assessment of Target Courses

No.	Course Code	Course Name	Oral Presentation Assessments	Cumulative Weightage of Assessment (Oral Presentations)
1	ELC590	English for Oral Presentations	i) Informative Speech (35%) ii) Pitching (20%) iii) Persuasive Speech (45%)	100%
2	LCC400	English for Informative Speech	i) Informative Speech 1 (30%) ii) Informative Speech 2 (40%)	70%
3	LCC402	English for Oral Reporting	i) Charts/Graphs Presentation (40%) ii) Field Report Presentation (40%)	80%
4	LCC600	English for Persuasion	i) Pitching (35%) ii) Persuasive Speech (45%)	80%

Note: Course details (course objective and assessment weightage) were extracted from official course documents uploaded in the university Academic Information Management System (AIMS).

A verified list of students enrolled in these four courses during the 2024 academic year was obtained from the English Language Department coordinator and cross-referenced with the university's Student Information Management System (SIMS). The sampling frame was limited to the four UiTM Selangor campuses (Shah Alam, Puncak Alam, Puncak Perdana, and Sungai Buloh) because the selected oral presentation-based English courses were consistently offered across these campuses throughout the 2024 academic year. Consequently, all students enrolled in the target courses had an equal opportunity to be included in the sampling frame. Collectively, the four campuses represented students from the three major academic clusters (science and technology, social science and humanities, and business and management), thereby providing a diverse and representative sampling frame for the target population. Table 3.2 presents the number of students enrolled in each course for the 2024 academic year.

Table 3.2
Sampling Frame

No	Course Code	Course Name	No of Students
1	ELC590	English for Oral Presentations	630
2	LCC400	English for Informative Speeches	828
3	LCC402	English for Oral Reporting	971
4	LCC600	English for Persuasion	157

Total	2,586

The development of a structured and well-defined sampling frame was essential to ensure the feasibility and representativeness of the study. A sampling frame provides a complete list of the population of interest, allowing participants to be selected systematically through probability sampling rather than subjective judgement (Yadav & Nagar, 2024). In the present study, the sampling frame narrowed the large undergraduate population to a manageable subset of 2,586 students, thereby improving the feasibility of the sampling process (Turner, 2020). It also defined the scope of the study in terms of the target population, location, and timeframe (Agaku, 2021).

Furthermore, the sampling frame strengthened the representativeness of the study by including students from the three major academic clusters and limiting the population to those enrolled in oral presentation-based English courses. This ensured that respondents possessed relevant experience to provide informed responses on the constructs investigated in this study. Establishing a clear and verified sampling frame also enabled the implementation of the two-stage probability sampling technique in supporting a systematic and unbiased sample selection process.

3.3.3 Sampling Design and Procedures

A carefully structured sampling design is essential to ensure representativeness of the target population (Turner, 2020). The design serves as the overarching framework for determining the appropriate sampling technique and sample size (Skinner & Wakefield, 2017).

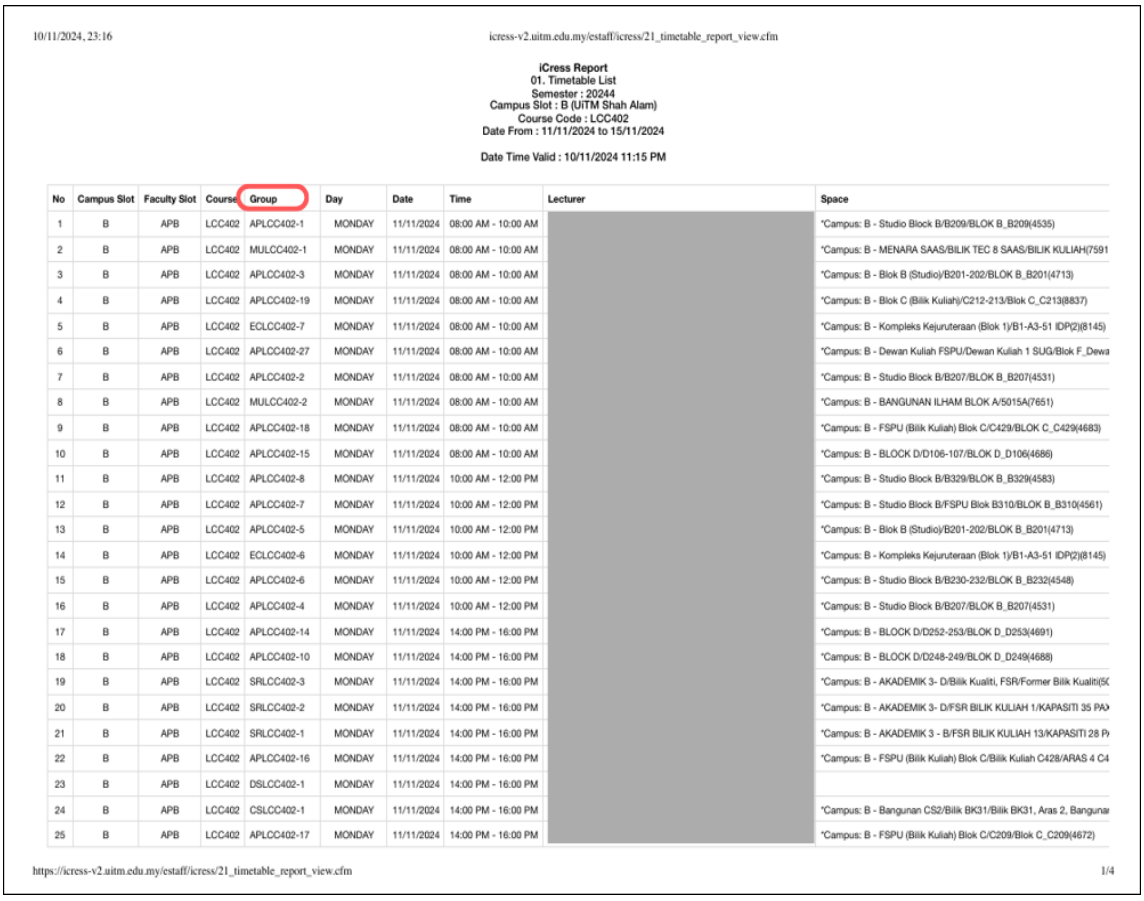
In this study, a two-stage sampling design was employed to enhance representativeness and minimise sampling bias (Barragán-Landy et al., 2020). In the first stage of sampling, stratified random sampling was used to divide the population into homogeneous strata according to a demographic factor, and a random sample was then drawn from each stratum (Elfil & Negida, 2017). Subsequently, simple random sampling was used in the second stage to select individual students to ensure each student has an equal chance of being selected as a respondent (Singh, 2003). This approach was particularly suitable given the large and dispersed student population as it allows stratification by programme clusters while maintaining random selection at the individual level. The following subsections elaborate on the procedures taken during both stages in further detail.

3.3.3.1 Stage One: Stratified Random Sampling for Class Selection

In the first stage, the population was stratified into four distinct groups based on course enrolment: English for Oral Presentations (ELC590), English for Informative Speech (LCC400), English for Oral Reporting (LCC402), and English for Persuasion (LCC600). Each course represented an individual stratum to ensure proportional representation across the four English proficiency courses. This stratification method aligns with the recommendations of Creswell and Creswell (2017) and Hankin et al. (2019) to ensure that each sub-group contributes adequately to the final sample.

Following stratification, the required sample size for each stratum was determined using the StatTrek Sample Size Calculator for Stratified Sampling. The calculation was based on a 95% confidence level, a 5% margin of error, and the population size of each stratum. The StatTrek calculator was selected because it accommodates stratified populations and facilitates proportional sample allocation across strata, thereby supporting a representative sample for each subgroup (see for instance Ezikwere, 2023; Tovar-Viera et al., 2026).

Subsequently, simple random sampling was performed using the StatTrek Random Number Generator to select classes within each stratum. An example of a class list used in this stage is presented in Figure 3.1.



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iCress Report
01. Timetable List
Semester : 20244
Campus Slot : B (UiTM Shah Alam)
Course Code : LCC402
Date From : 11/11/2024 to 15/11/2024

Date Time Valid : 10/11/2024 11:15 PM

No	Campus Slot	Faculty Slot	Course	Group	Day	Date	Time	Lecturer	Space
1	B	APB	LCC402	APLCC402-1	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - Studio Block B/B209/BLOK B_B209(4535)
2	B	APB	LCC402	MULCC402-1	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - MENARA SAAS/BILIK TEC 8 SAAS/BILIK KULIAH(7591
3	B	APB	LCC402	APLCC402-3	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - Blok B (Studio)/B201-202/BLOK B_B201(4713)
4	B	APB	LCC402	APLCC402-19	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - Blok C (Bilik Kuliah)/C212-213/Blok C_C213(8837)
5	B	APB	LCC402	ECLCC402-7	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - Kompleks Kejuruteraan (Blok 1)/B1-A3-51 IDP(2)(8145)
6	B	APB	LCC402	APLCC402-27	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - Dewan Kuliah FSPU/Dewan Kuliah 1 SUG/Blok F_Dewa
7	B	APB	LCC402	APLCC402-2	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - Studio Block B/B207/BLOK B_B207(4531)
8	B	APB	LCC402	MULCC402-2	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - BANGUNAN ILHAM BLOK A/5015A(7651)
9	B	APB	LCC402	APLCC402-18	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - FSPU (Bilik Kuliah) Blok C/C429/BLOK C_C429(4683)
10	B	APB	LCC402	APLCC402-15	MONDAY	11/11/2024	08:00 AM - 10:00 AM		*Campus: B - BLOCK D/D106-107/BLOK D_D106(4686)
11	B	APB	LCC402	APLCC402-8	MONDAY	11/11/2024	10:00 AM - 12:00 PM		*Campus: B - Studio Block B/B329/BLOK B_B329(4583)
12	B	APB	LCC402	APLCC402-7	MONDAY	11/11/2024	10:00 AM - 12:00 PM		*Campus: B - Studio Block B/FSPU Blok B310/BLOK B_B310(4561)
13	B	APB	LCC402	APLCC402-5	MONDAY	11/11/2024	10:00 AM - 12:00 PM		*Campus: B - Blok B (Studio)/B201-202/BLOK B_B201(4713)
14	B	APB	LCC402	ECLCC402-6	MONDAY	11/11/2024	10:00 AM - 12:00 PM		*Campus: B - Kompleks Kejuruteraan (Blok 1)/B1-A3-51 IDP(2)(8145)
15	B	APB	LCC402	APLCC402-6	MONDAY	11/11/2024	10:00 AM - 12:00 PM		*Campus: B - Studio Block B/B230-232/BLOK B_B232(4548)
16	B	APB	LCC402	APLCC402-4	MONDAY	11/11/2024	10:00 AM - 12:00 PM		*Campus: B - Studio Block B/B207/BLOK B_B207(4531)
17	B	APB	LCC402	APLCC402-14	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - BLOCK D/D252-253/BLOK D_D253(4691)
18	B	APB	LCC402	APLCC402-10	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - BLOCK D/D248-249/BLOK D_D249(4688)
19	B	APB	LCC402	SRLCC402-3	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - AKADEMIK 3- D/Bilik Kualiti, FSR/Former Bilik Kualiti(5(
20	B	APB	LCC402	SRLCC402-2	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - AKADEMIK 3- D/FSR BILIK KULIAH 1/KAPASITI 35 PA
21	B	APB	LCC402	SRLCC402-1	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - AKADEMIK 3 - B/FSR BILIK KULIAH 13/KAPASITI 28 P
22	B	APB	LCC402	APLCC402-16	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - FSPU (Bilik Kuliah) Blok C/Bilik Kuliah C428/ARAS 4 C4
23	B	APB	LCC402	DSLCC402-1	MONDAY	11/11/2024	14:00 PM - 16:00 PM		
24	B	APB	LCC402	CSLCC402-1	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - Bangunan CS2/Bilik BK31/Bilik BK31, Aras 2, Bangunar
25	B	APB	LCC402	APLCC402-17	MONDAY	11/11/2024	14:00 PM - 16:00 PM		*Campus: B - FSPU (Bilik Kuliah) Blok C/C209/Blok C_C209(4672)

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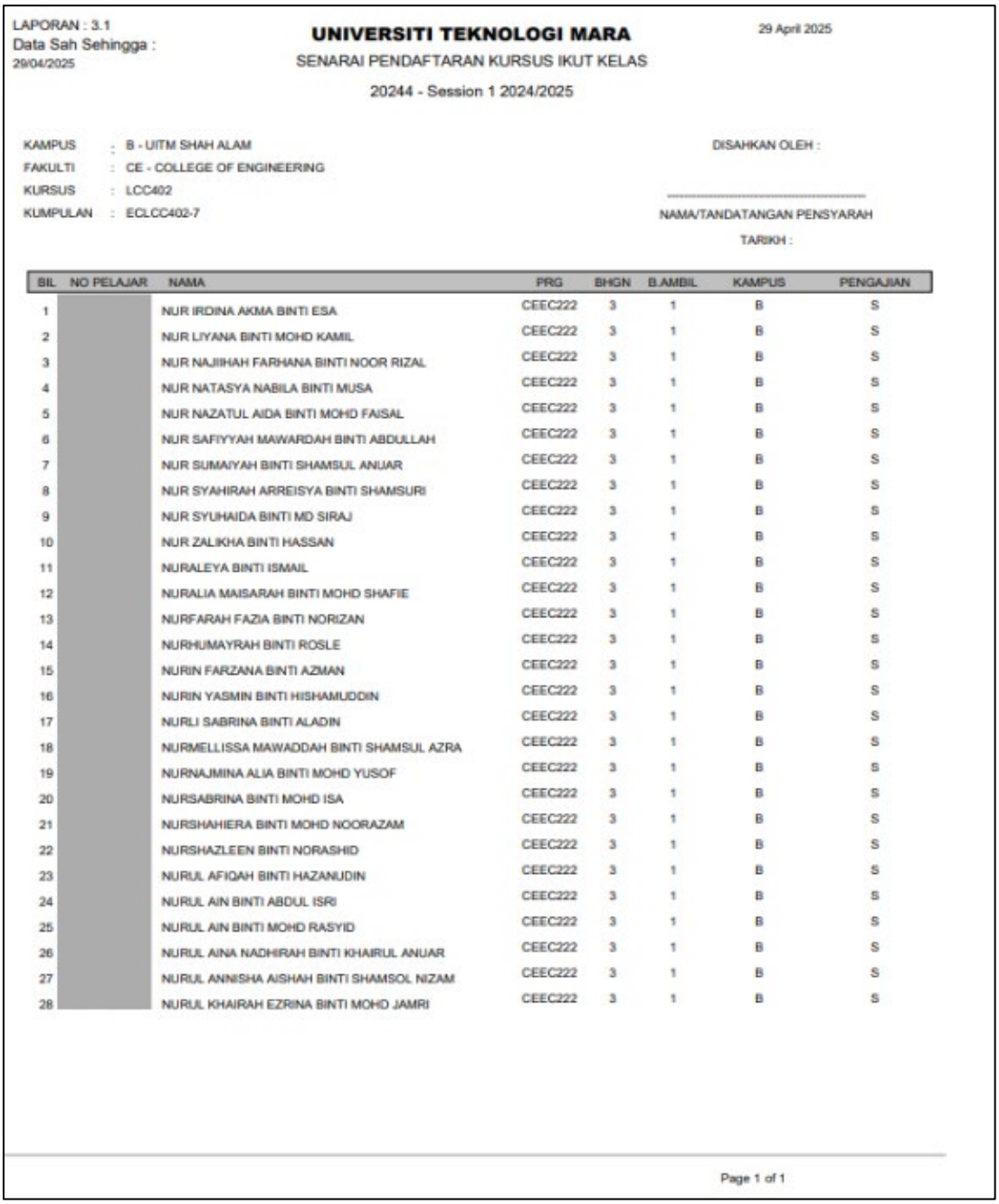
Figure 3.1 Page 1 of LCC402 Class List

3.3.3.2 Stage Two: Simple Random Sampling for Student Selection

In the second stage, simple random sampling was applied to select the individual students from the classes identified in the first stage. Student name lists were obtained from the faculty administration and verified against the university's Student Information Management System (SIMS) to ensure accuracy.

The required number of students to be selected from each stratum was determined using the Raosoft Sample Size Calculator by applying a 5% margin of error and 95% confidence level. Subsequently, the StatTrek Random Number Generator was used to randomly select individual students from each class list (Figure 3.2) to ensure each student had an equal chance of inclusion in the final sample. This procedure minimised bias and enhanced the representativeness of the study sample (Wang, 2024; Zrineh et al., 2026).



LAPORAN : 3.1
Data Sah Sehingga :
29/04/2025

UNIVERSITI TEKNOLOGI MARA

SENARAI PENDAFTARAN KURSUS IKUT KELAS

20244 - Session 1 2024/2025

29 April 2025

KAMPUS : B - UITM SHAH ALAM
FAKULTI : CE - COLLEGE OF ENGINEERING
KURSUS : LCC402
KUMPULAN : ECLCC402-7

DISAHKAN OLEH :

NAMA/TANDATANGAN PENSYARAH

TARIKH :

BIL	NO PELAJAR	NAMA	PRG	BHGN	B.AMBIL	KAMPUS	PENGAJIAN
1		NUR IRDINA AKMA BINTI ESA	CEEC222	3	1	B	S
2		NUR LIYANA BINTI MOHD KAMIL	CEEC222	3	1	B	S
3		NUR NAJIIHAH FARHANA BINTI NOOR RIZAL	CEEC222	3	1	B	S
4		NUR NATASYA NABILA BINTI MUSA	CEEC222	3	1	B	S
5		NUR NAZATUL AIDA BINTI MOHD FAISAL	CEEC222	3	1	B	S
6		NUR SAFIYYAH MAWARDAH BINTI ABDULLAH	CEEC222	3	1	B	S
7		NUR SUMAIYAH BINTI SHAMSUL ANUAR	CEEC222	3	1	B	S
8		NUR SYAHIRAH ARREISYA BINTI SHAMSURI	CEEC222	3	1	B	S
9		NUR SYUHAIDA BINTI MD SIRAJ	CEEC222	3	1	B	S
10		NUR ZALIKHA BINTI HASSAN	CEEC222	3	1	B	S
11		NURALEYA BINTI ISMAIL	CEEC222	3	1	B	S
12		NURALIA MAISARAH BINTI MOHD SHAFIE	CEEC222	3	1	B	S
13		NURFARAH FAZIA BINTI NORIZAN	CEEC222	3	1	B	S
14		NURHUMAYRAH BINTI ROSLE	CEEC222	3	1	B	S
15		NURIN FARZANA BINTI AZMAN	CEEC222	3	1	B	S
16		NURIN YASMIN BINTI HISHAMUDDIN	CEEC222	3	1	B	S
17		NURLI SABRINA BINTI ALADIN	CEEC222	3	1	B	S
18		NURMELLISSA MAWADDAH BINTI SHAMSUL AZRA	CEEC222	3	1	B	S
19		NURNAJMINA ALIA BINTI MOHD YUSOF	CEEC222	3	1	B	S
20		NURSABRINA BINTI MOHD ISA	CEEC222	3	1	B	S
21		NURSHAHIERA BINTI MOHD NOORAZAM	CEEC222	3	1	B	S
22		NURSHAZLEEN BINTI NORASHID	CEEC222	3	1	B	S
23		NURUL AFIQAH BINTI HAZANUDIN	CEEC222	3	1	B	S
24		NURUL AIN BINTI ABDUL ISRI	CEEC222	3	1	B	S
25		NURUL AIN BINTI MOHD RASYID	CEEC222	3	1	B	S
26		NURUL AINA NADHIRAH BINTI KHAIRUL ANUAR	CEEC222	3	1	B	S
27		NURUL ANNISHA AISHAH BINTI SHAMSOL NIZAM	CEEC222	3	1	B	S
28		NURUL KHAIRAH EZRINA BINTI MOHD JAMRI	CEEC222	3	1	B	S

Page 1 of 1

Figure 3.2 Example of Student Name List for LCC402 Selected Classes

In summary, this study employed a two-stage probability sampling design, comprising stratified random sampling in the first stage and simple random sampling in the second stage. This integrated approach supports unbiased sample selection, improves generalisability, and strengthens the overall methodological integrity of the study. The next section presents the sample size calculations for both pilot and fieldwork data collection.

3.3.4 Sample Size Determination

Determining an appropriate sample size is a critical aspect of research planning as it directly influences the accuracy, reliability, and generalisability of the study's findings (Sekaran & Bougie, 2016). A sample that is too small may lead to high sampling error and unreliable results (Weber & Hoo, 2018), whereas an excessively large sample may inflate Type 1 error rates and lead to false positive conclusions (Armstrong, 2019; Kaplan et al., 2014). Therefore, a comprehensive approach was adopted in this study to establish the optimal sample size for both the pilot study and the main fieldwork.

3.3.4.1 Sample Size Determination for the Pilot Data

A pilot study was conducted to examine the feasibility of the research procedures. Pilot studies are essential for identifying design flaws, testing data collection procedures, and ensuring that instruments function as intended (Bowden et al., 2002; Julious, 2016; Sorzano et al., 2017; van Teijlingen & Hundley, 2002).

Also, as this study intended to conduct exploratory factor analysis (EFA), a sufficient sample size is required to yield stable and interpretable factor structures. Although a specific sample size was not mentioned in the literature, scholars generally recommend a minimum of 100 samples, regardless of the number of variables (Awang, 2015; Bahkia et al., 2019; Fabrigar et al., 1999; Pearson & Mundfrom, 2010). Based on these guidelines, a target of at least 100 responses was established.

A two-stage probability sampling approach was used to achieve this target. In the first stage, stratified random sampling was used. The population was first divided by course (ELC590, LCC400, LCC402, and LCC600), ensuring each course was proportionally represented. Next, class lists obtained from the faculty administration were used to randomly select classes using a StatTrek random number generator. A total of 12 classes were selected: 4 classes for ELC590, 3 classes for LCC400, 3 classes for LCC402, and 2 classes for LCC600.

In the second stage, individual students were randomly selected from these classes using name lists verified through the Student Information Management System (SIMS). The Raosoft Sample Size Calculator was used to estimate the required number of respondents per course (95% confidence level and 5% margin of error). Final student

selections were made using the StatTrek random number generator. Table 3.3 summarises the stratified and random sampling procedures for the pilot study.

Table 3.3
Sampling Size Determination for Pilot Study

No.	Course Code	Course Name	No. of Registered Classes	First Stage (Stratified Random Sampling)	Second Stage (Simple Random Sampling)
				Number of Selected Classes	Number of Selected Students
1	ELC590	English for Oral Presentations	42	4	93
2	LCC400	English for Informative Speeches	35	3	60
3	LCC402	English for Oral Reporting	43	3	61
4	LCC600	English for Persuasion	6	2	44
		Total	126	12	258

Following the identification, the email addresses of the selected 258 students were obtained from the faculty administration office. These students were then invited to participate in the pilot study via email, which included a personalised message, the survey link, a brief explanation of the study's purpose, a copy of the ethics approval letter, and information about the researcher's credentials.

Despite intermittent reminders, only 152 valid responses were received from the 258 initially contacted, accounting for 59% response rate. This rate was considered acceptable for voluntary online surveys, which typically range from 30% to 60% (Bujang et al., 2024; Shiyab et al., 2023), and met the minimum threshold of 100 responses required for conducting EFA. This sample size was also cross-validated using the Raosoft Sample Size Calculator, which confirmed that 152 responses were statistically sufficient at a 95% confidence level and a 5% margin of error, given the pilot population size. As shown in Table 3.4, a total of 152 students participated in the pilot study. The largest proportion of respondents was from ELC590 (60.5%), followed by LCC402 (19.1%), LCC400 (13.8%), and LCC600 (6.6%). Thus, the number of responses obtained was adequate to proceed with the EFA and to assist in refining the data collection procedures.

Table 3.4
Sample Size for Pilot Data

No.	Course Code	Course Name	Number of Students Who Answered	Percentage (%)
1	ELC590	English for Oral Presentations	92	60.5
2	LCC402	English for Oral Reporting	29	19.1
3	LCC400	English for Informative Speeches	21	13.8
4	LCC600	English for Persuasion	10	6.6
		Total	152	100

3.3.4.2 Sample Size Determination for the Fieldwork Data

Determining an appropriate sample size is critical for research planning, as it directly influences the reliability and validity of statistical analysis (Altman, 1980). As pilot studies and fieldwork serve different methodological purposes, different sample sizes are required. For the fieldwork, sample size determination was guided by both statistical guidelines and literature discussions.

Krejcie and Morgan's (1970) widely used sample size table indicates that a sampling frame of 2,400 (refer to Table 3.2) requires a sample size of 331 which served as an initial benchmark. Additionally, Hair et al. (2010) suggest that the minimum sample size depends on the number of latent constructs and the number of measured items, as summarised in Table 3.5.

Table 3.5
Minimum Sample Size Guidelines for SEM (Hair et al., 2010)

No	Model Characteristics (Number of Latent Constructs and Items)	Minimum Sample Size Required
1	Five or less latent constructs and each latent construct has more than three measuring items.	100
2	Seven or less latent constructs and each latent construct has more than three items.	150
3	Seven or less latent constructs and each latent construct has less than three items.	300
4	More than seven latent constructs. Some constructs have less than three items.	500

In view that this study has five latent constructs (perceived autonomy support, grit, intrinsic motivation, feedback literacy, and oral presentation competence), and each construct is measured with more than three items, a minimum sample size of 100 respondents would suffice according to Hair et al.'s (2010) recommendations. However, drawing on recommendations from Harris and Schaubroeck (1990), Kline (2010), Chou and Bentler (1995) and Bagozzi and Yi (2012), a larger sample between 200 and 400 was targeted to enhance statistical power.

Applying a 5:1 item-to-respondent ratio (Ali Memon et al., 2020; Yusoff et al., 2021) to this study's 76-item instrument suggested a target of 380 responses which is consistent with Raosoft sample size calculator (95% confidence level and 5% margin of error). Accordingly, an ideal minimum of 380 responses was determined for the actual fieldwork data collection.

Similar to the pilot study, a two-stage probability sampling method was employed to collect the fieldwork data. In the first stage, stratified random sampling was used to divide the sampling frame into four course-based strata (ELC590, LCC400, LCC402, and LCC600), from which 38 classes were randomly selected. Notably, classes that were previously included in the pilot study were excluded from this stage. In the second stage, simple random sampling was applied within each class list to select students as presented in Table 3.6.

Table 3.6
Sampling Size Determination Procedures for Fieldwork Data

No.	Course Code	Course Name	No of Registered Classes	No of Registered Students	First Stage (Stratified Random Sampling)	Second Stage (Simple Random Sampling)
					Number of Selected Classes	Number of Selected Students
1	ELC590	English for Oral Presentations	42	633	11	333
2	LCC400	English for Informative Speeches	35	828	11	263
3	LCC402	English for Oral Reporting	43	971	12	280
4	LCC600	English for Persuasion	6	154	4	100
		Total	126	2,586	38	976

A total of 976 students were invited to participate in the fieldwork phase. Despite periodic email reminders, 404 students completed the questionnaire. Table 3.7 presents the distribution of these respondents across the four English courses, with the percentages calculated based on the total number of completed responses (N=404).

Table 3.7
Final Sample Size for Fieldwork Data

No.	Course Code	Course Name	Number of Students Who Answered	Percentage (%)
1	LCC402	English for Oral Reporting	160	39.6
2	LCC400	English for Informative Speeches	126	31.2
3	ELC590	English for Oral Presentations	83	20.5
4	LCC600	English for Persuasion	28	6.9
5	-	None of the mentioned above	7	1.7
		Total	404	100%

Following the initial data screening, seven responses from students who were not enrolled in the target courses and 16 responses exhibiting response-pattern bias, characterised by identical responses across all questionnaire items, were excluded, leaving 385 screened cases. Subsequently, during the data screening and cleaning procedures, specifically the assessment of multivariate outliers (Section 3.12.2.2), two cases were identified as multivariate outliers and removed. This resulted in a final analytical sample of 383 respondents (N=383), representing an overall response rate of 39.2%.

Although the response rate falls within the typical range reported for voluntary online surveys (30%–60%) (Bujang et al., 2024; Shiyab et al., 2023), the final sample more importantly exceeded the minimum requirement of 380 participants established through both theoretical recommendations and statistical calculation. Therefore, the final sample was considered adequate for conducting confirmatory factor analysis (CFA) and structural equation modelling (SEM).

Notably, the distribution of respondents varied across the four English courses, with LCC402 contributing the largest proportion of responses (39.6%), followed by LCC400 (31.2%), ELC590 (20.5%), and LCC600 (6.9%). Nevertheless, because

stratified random sampling was employed during participant selection, all four strata remained represented in the final dataset.

In conclusion, both the pilot and fieldwork phases employed rigorous sampling procedures. The final sample sizes obtained for both phases satisfied the minimum statistical and methodological requirements, thereby supporting the representativeness and adequacy of the data for the subsequent analyses.

3.4 Interview with Hiring Managers

In this study, preliminary interviews provided an exploratory groundwork for designing a contextually relevant research instrument. This phase is consistent with methodological recommendations by Krauss et al. (2009) and Gotowiec et al. (2024) who advocate for background inquiry with relevant stakeholders to strengthen instrument validity, particularly in applied educational and communication research. Through direct engagement with hiring managers across diverse industries, this process aimed to identify key oral presentation competencies considered essential for graduate employability. The findings were subsequently used to refine and supplement, where appropriate, the items measuring oral presentation competence in the survey instrument.

3.4.1 Participant Selection

Hiring managers were purposively selected for the preliminary interviews based on two predefined criteria: (1) a minimum of 10 years of professional experience, and (2) active involvement in the hiring process. These criteria were intended to ensure that participants had substantial professional experience and could provide perspectives into the presentation competencies expected of graduate hires.

A total of nine potential hiring managers were identified through professional recommendations and subsequent systematic searches of publicly available LinkedIn profiles. Formal invitation emails were sent, and six initially agreed to participate. However, one participant later withdrew, and another served as a pilot which resulted in four full interviews for analysis. Although the final sample size of four participants was limited, this small group was deemed suitable for the exploratory nature of this qualitative phase (Islam & Aldaihani, 2022). In instrument development studies, small samples ranging from three to five expert participants are often sufficient to establish

initial content validity and thematic direction (Buschle et al., 2022; DeVellis, 2016). This aligns with the purpose of the preliminary interviews which aims to elicit rich, context-specific insights to inform the development and refinement of survey items (Gotowiec et al., 2024).

The selected hiring managers represented a range of industries and organisational types, including public listed companies, multinational corporations, small- and medium-sized enterprises, and private limited firms. This diversity was intentionally sought to ensure coverage of varying oral communication demands across sectors such as media, talent development, digital finance, and auditing. Table 3.8 presents the demographic profiles of the participating hiring managers.

Table 3.8
Demographic Profile of Hiring Managers

Participant	Gender	Years of Experience	Position/Rank	Type of Organisation	Industry
Pilot	Male	19	Assistant Manager	Public Listed Multinational	Media
Participant 1 (P1)	Male	24	Manager	Private Limited	Training and Talent Development
Participant 2 (P2)	Male	14	Director and Co-founder	Enterprise	Services
Participant 3 (P3)	Male	22	Manager & Head of Department	SME	Digital Financial Services
Participant 4 (P4)	Male	34	Executive Vice President	Public Listed GLC	Financial Banking

All participants received a detailed email outlining the study's objectives and procedures. Informed consent was obtained prior to the interviews and ethical approval for this research was granted by the university's research ethics committee (Ref. No: REC/03/2022 (PG/MR/40) (refer to Appendix 3).

Prior to conducting the full interviews, a pilot interview was carried out with one hiring manager who met the same selection criteria as the main participants. Feedback from the pilot led to minor adjustments in the interview protocol to improve the clarity and coherence of the questions. Specifically, several questions were

reworded to encourage more open-ended responses. For example, questions that initially elicited brief yes/no answers were revised to prompts such as "Can you describe your experience..." or "Could you elaborate on how..." to encourage richer and more detailed responses. In addition, ambiguous terms, such as communication skills, presentation skills, and graduate preparedness, were replaced with more specific expressions (e.g., oral presentation competence, oral presentation performance in the workplace, and graduates' readiness to communicate in professional settings) to minimise varied interpretations among participants. The sequence of several questions was also reorganised so that broader questions preceded more specific ones, thereby improving the logical flow of the interview.

The participants represented diverse senior roles brought distinct perspectives on the communicative competencies required in their respective fields. For instance, P1, a manager in a private training and development company, was actively involved in evaluating the oral presentation performance of fresh graduates during onboarding programmes. P3, serving as both manager and head of department in a digital finance SME, assessed candidates during high-pressure pitch presentations and client briefings. Meanwhile, P4, an executive vice president in a government-linked company (GLC), frequently observed graduate presentations informal corporate meetings and interviews where concise and confident delivery was expected. The processes undertaken to conduct the interviews are elaborated in the following section.

3.4.2 Protocol Development and Interview Procedures

A structured interview process was implemented to ensure that the data collected from hiring managers was valid for survey instrument development. First, a pilot interview was conducted with one hiring manager who met the same selection criteria as the main participants. This pilot session allowed for refinement of the question wording and sequence to ensure that the items were open-ended, comprehensible, and capable of eliciting rich and authentic responses. Minor modifications were made to improve phrasing and flow of the interview.

The main interviews were conducted online via Google Meet due to geographical and scheduling constraints. Each session lasted approximately 20 to 30 minutes and began with a reiteration of the study's purpose, followed by confirmation of informed consent. The interviews followed a semi-structured protocol designed to

elicit hiring managers' perspectives on the competencies they consider essential for effective oral presentations among graduates.

The guiding questions were adapted from Ortiz et al. (2016), who explored employers' perceptions of communication competencies and graduate readiness. To facilitate engagement and ensure that participants had relevant experience with oral presentation contexts, the interview began with general questions on their work experience and understanding of oral communication. These warm-up questions served as contextual scaffolding before progressing to more focused prompts about specific behaviours and competencies observed during presentations.

As the interviews followed a semi-structured format, the questions were not fixed. Some questions were adapted, omitted, or expanded depending on the flow of the conversation and the participants' responses. This flexibility allowed for a deeper exploration of the relevant areas while still adhering to the research objectives. The list of questions is presented in Table 3.9.

Table 3.9
Preliminary Interview Questions

Section	Question Number	Interview Question
Warm-Up Questions	1	Can you tell me a little about your professional background?
	2	What is your current role, and how long have you held it?
	3	What is your experience with hiring or evaluating new employees?
	4	How would you define oral communication in a professional context?
	5	From your perspective, what role does oral communication play in the workplace?
Main Interview Questions	6	How do you usually assess a candidate's ability to present information or ideas effectively?
	7	What behaviours or qualities do you observe during a strong oral presentation?
	8	Can you describe how graduates usually perform when asked to present in professional settings?
	9	What does effective preparation for an oral presentation look like to you?
	10	How do you typically evaluate how well a message is delivered during an oral presentation?
	11	How do presenters tend to respond when asked questions during or after an oral presentation?
	12	What presentation behaviours are important to you?
	13	Can you describe what distinguishes a compelling presentation from a less effective one?
	14	In your experience, how do candidates handle unexpected situation during presentations?
Closing Questions	15	How would you describe the key qualities or skills that contribute to a successful presentation?
	16	In your view, what kind of experiences or background help someone become a better presenter?
	17	Are there other considerations you take into account when evaluating someone's presentation ability?
	18	Is there anything you like to share about how you view oral presentation competence in the professional context?

The procedures for conducting the preliminary interviews were adapted from Doyle (2007) interview framework and are summarised in Table 3.10. The process comprised six structured steps, including initial contact, pre-interview preparation, interview implementation, data transcription, and analysis, member checking preparation, and verification. These steps were designed to ensure procedural transparency and ethical compliance for the preliminary interviews with hiring managers.

Table 3.10
Preliminary Interview Procedures

No	Main Steps		Specific Tasks
1	Establishing initial contact	**i**	Contact made with participants
		ii	Agreement to meet and time arranged
2	Conducting pre-interview preparation	**i**	Information sheet and interview question emailed
		ii	Consent form signing
3	Conducting the interviews	**i**	Development and refinement of interview protocol
		ii	Consent to record interview obtained
		iii	Interviews conducted
4	Transcribing and analysing	**i**	Interviews transcribed verbatim
		ii	Codes and themes identification
		iii	Cross-checking of codes and themes with supervisory committee
5	Preparing for member checking interview	**i**	Preparation of content to be discussed during member checking interview
		ii	Post transcription emailed to participant
6	Conducting member checking interviews	**i**	Confirmation of interview content
		ii	Discussion of themes with participants
		iii	Discussion of alignment between themes and excerpts
		iv	Closure of the member check

After the completion of Step 4 which involved interview data transcription, the study proceeded to submit to transcribed data for member checking (Step 5). The procedures onducted for member checking are explained in the next section.

3.4.3 Member Checking

All interviews were video-recorded with participants' consent and transcribed verbatim to ensure accuracy. As recommended by Doyle (2007), each interview transcript was subsequently shared with the respective participant for verification. This

process, commonly referred to as member checking or participant validation (Birt et al., 2016), provides a reflective space for participants to confirm, clarify, or elaborate on their responses (Candela, 2019). Member checking is recognised as a key strategy in enhancing the credibility and confirmability of the preliminary interview findings (DeCino & Waalkes, 2019).

Out of the four participants, two agreed to engage in a follow-up member checking interview. The remaining two were unable to participate due to work-related scheduling conflicts. The two follow-up sessions focused on two core components: (1) transcript accuracy and (2) confirmation of the researcher's interpretation of the preliminary themes. Participants reviewed their interview transcripts and confirmed that their responses were accurately captured. They were also invited to reflect on the emerging thematic structure and provide feedback on whether it represented their experiences authentically.

Although only two participants participated in this process, both offered detailed responses, and no substantive changes to the data or themes were required. Results from these sessions revealed no substantive changes to the data or thematic structure. However, one participant offered clarification that helps to illuminate the interpretation of "adaptability" as a spontaneous cognitive process rather than answering quickly and fluently. The limited participation in this process is acknowledged as a limitation yet the consistency between the data and the participants validates provides support for the trustworthiness of the findings and acts as a confirmatory step that facilitates the analysis of the preliminary interview data, as presented in the next section.

3.4.4 Interview Data Analysis

The preliminary interview was conducted to gain in-depth insights into hiring managers' perceptions of oral presentation competence, specifically to inform the development of the survey instrument, rather than to establish generalisable findings about industry-wide expectations (Buschle et al., 2022). The interview data were analysed using Braun and Clarke (2006) inductive thematic analysis to identify patterns grounded in hiring managers' perspectives without the constraints of a pre-existing coding framework (Nowell et al., 2017).

This approach allowed for the hiring managers' responses to guide the conceptualisation of oral presentation competence. This process ensures that the

instrument reflects competencies valued in real-world workplace settings (Nassar-McMillan et al., 2010). Given the exploratory nature of this study, the thematic analysis was intentionally confined to the theme level, focusing on eliciting key competencies based on the managers' experiences and workplace practices.

The thematic analysis was conducted manually following Braun and Clarke's six-phase process, focusing on items elicitation. In the first phase (familiarisation), all interview recordings were transcribed verbatim by the researcher, and each transcript was read multiple times. During this phase, preliminary memos were recorded to capture initial impressions and recurring ideas, particularly in relations to how participants described graduate strengths and shortcomings in presentation settings.

In the second phase (generating initial codes), open coding was conducted line-by-line across the four full interviews, generating codes that were descriptive in nature such as lack confidence, reads from slides, and engages audience. These codes remained closely linked to participants' responses through inductive coding, ensuring analysis remained grounded without imposing theoretical assumptions.

In the third phase (searching for themes), the codes were clustered based on recurring competencies mentioned by multiple participants. These clusters formed initial themes such as confidence and self-presentation, structure and clarity. A thematic map was drafted to visualise the relationships between competencies, and attention was paid to ensuring that each theme captured the distinct yet interrelated aspects of oral presentations.

The fourth phase (reviewing themes) involved checking the coherence of each theme against the coded extracts and the entire dataset. In some cases, boundaries between the themes were refined. For example, responses that originally sat under the confidence theme were reassigned to adaptability when they dealt specifically with reacting to unpredictable questions.

In the fifth phase of thematic analysis, each theme was clearly outlined and finalised to capture specific aspects of oral presentation competence as perceived by hiring managers. Detailed thematic summaries were crafted to define the essence of each theme, ensuring they were distinct and directly relevant to the research objectives. Given the exploratory nature of this preliminary study, the analysis was intentionally confined to the theme level. No broader domains were constructed, as the primary aim was to identify and understand the key themes emerging from the data.

Finally, in the sixth phase (reporting), the refined themes were organised into four core competencies and supported by illustrative quotations. These findings were compared with the exploratory survey findings to enrich the survey instrument development and adaptation processes.

3.4.5 Interview Findings

The qualitative interview data were analysed using an inductive thematic approach (Braun & Clarke, 2006) which allowed for the identification of recurring patterns directly grounded in the perspective of four hiring managers. Four interrelated competencies were identified: (1) confidence, (2) message structuring, (3) preparation, (4) adaptability. All quotations presented for each theme were transcribed verbatim from the interviews (Appendix 4). Minor edits were made to punctuation for clarity and readability without altering the meaning or intent of the participants' responses.

3.4.5.1 Theme 1: Confidence

Confidence was consistently described by hiring managers as a key indicator of oral presentation competence. It was associated not only with professional presence, but also with credibility, preparedness, and the ability to perform under observation. Participants referred to confidence as something they actively look for during presentations.

> *"If they look confident during presentations, I would most likely hire them. If they are not confident enough with themselves, I hesitate." (P2)*

> *"Some candidates would just read the notes from the slides and it will become boring as they don't seem confident in themselves." (P3)*

> *"You don't have to wait to be asked to speak…you need to speak up and show confidence." (P4)*

All three participants (P2, P3, and P4) viewed confidence as a visible and assessable element of oral presentation competence. Despite differences in their professional settings, they shared a similar expectation that confidence should be evident through observable behaviours presentations. P2 assessed confidence based on

how the candidates composed themselves in front of an audience. P3 associated confidence with the ability to speak independently without relying on slides or notes and interpreted this behaviour as a sign that the presenter was well-prepared and in control. Similarly, P4 identified confidence through candidates' willingness to speak voluntarily during group settings, noting that those who did not wait to be prompted demonstrated greater communicative assurance. Across all three accounts, confidence was described as an important trait and had a strong relationship with presentations. This leads to the next competency which is the ability to present ideas in a structured manner.

3.4.5.2 Theme 2: Message Structuring

Participants consistently emphasised the importance of clear and purposeful message organisation as a core component of oral presentation competence. They viewed structure as essential to ensuring the clarity of ideas and the effectiveness of delivery. Unlike informal conversation, professional presentations were expected to follow a recognisable sequence and reflect the speaker's ability to shape content meaningfully for the audience.

> *"Sometimes people can't understand what they talk about when you present, there's a structure to it." (P1)*

> *"Some candidates would just read the notes from the slides and it will become boring…" (P3)*

> *"You need to capture their attention and explain to them thoroughly within the limited time." (P3)*

> *"When you want to present something, you need to do research that is appropriate. We know that Malaysians copy and paste a lot. There's no proper commitment to it and it will lead to failure." (P1)*

> *"We give them a topic to talk about… you can see people competing. Speaker #2 can't repeat what speaker #1 said. Everybody tried to become speaker #1 because they are afraid their ideas will be stolen." (P1)*

These quotations reflect a shared concern among hiring managers regarding the lack of message clarity and logical flow in graduate presentations. Participants described structure as more than an introduction-body-conclusion format. In their view, structure is treated as an indicator of communicative thoughtfulness and audience awareness. Both P1 and P3 pointed to overreliance on scripts or slides and underdeveloped content as signs of poor structure. P1's repeated emphasis on weak content development, repetition, and unoriginal delivery also suggests that poor message organisation stems from inadequate preparation and limited content ownership. P3 reinforced that the structure must be adapted to the time constraints and attention spans of professional audience which requires presenters to prioritise and sequence ideas effectively. Across all interviews, message structuring was posited as a cognitive skill that revealed the graduate's ability to transform raw information into a coherent narrative.

3.4.5.3 Theme 3: Preparation

Although structural clarity is critical for delivering coherent and persuasive presentations, participants also emphasised that such clarity is rarely achieved without deliberate preparation. Preparation was regarded as a prerequisite for confidence, audience engagement, and content control.

> *"They just attend and go…" (P1)*
>
> *"They should also be good enough to elaborate the points without referring to any sort of notes or slides…" (P3)*
>
> *"You are able to come up with a spontaneous response only if you grasp the situation and have prepared." (P4)*
>
> *"You have to understand that in front of you are audiences that want to listen to you… That can bring you a commitment so that you can present better." (P1)*

These reflections point to a shared concern that many graduates approach presentations with insufficient preparation for their content. Participants observed that presenters often treated the task as a routine rather than an opportunity to demonstrate professionalism and communication competence. Preparation was described as integral

not only to structuring content but also to internalising it which enables the presenters to elaborate without relying on notes and engage the audience confidently. For P1 and P3, preparation reflected personal commitment and message control while for P4, it is important for real-time adaptability. P2 also linked preparation to credibility, suggesting that visible readiness influences hiring decisions. Across interviews, preparation was viewed as a core competency for oral presentations.

3.4.5.4 Theme 4: Adaptability

Adaptability emerged as an essential dimension of oral presentation competence, particularly in contexts where presenters must adjust their message based on audience cues and unanticipated prompts. Unlike preparation or message structuring which involves planned delivery, adaptability reflect the graduates' ability to respond in real time. Hiring managers described this as an essential competency for oral presentations in fast-paced professional settings such as high-stakes meetings and interviews assessments where interactions are rarely scripted.

> *"Candidates do not need to wait for their turn to speak up… they must raise their hand and speak." (P4)*
>
> *"Spontaneous mind is able to come when they are able to grasp the situation and you are able to speak up your mind…" (P4)*
>
> *"If they are prepared, they are ready to face with any type of questions during the interview. That shows they put in effort." (P2)*
>
> *"…capture executives' attention and explain thoroughly within the limited time." (P3)*

These quotations reflect a shared belief among hiring managers that adaptability is a defining feature of strong oral presentation performance. P4 described assessment settings where graduates were expected to initiate contributions and respond spontaneously without prompting. He noted that hesitation or passivity was interpreted as a lack of readiness or communicative agility. P2 echoed this expectation, explaining that responsiveness during interviews signals not only content knowledge but also

preparation and professional maturity. P3 similarly emphasised the need to tailor messaging quickly and effectively, particularly when presenting to senior stakeholders under time constraints. Across these perspectives, adaptability was not framed as a bonus skill but as a marker of presentation intelligence which refers to the ability to assess the moment, prioritise content, and communicate effectively without relying on memorised scripts. For participants, this competency distinguished graduates who were professionally agile and ready for workplace communication from those dependent on rehearsed or rigid delivery.

3.5 Exploratory Survey with Students

An exploratory survey was developed and administered during the preliminary phase of this study. This survey sought to gather students' perspectives on the factors associated with oral presentations competence, with open-ended responses subjected to a thematic coding process and intercoder analysis to establish key themes. These emergent themes contributed to the subsequent stages of finalised instrument development.

3.5.1 Instrument, Participant Selection and Data Collection

The exploratory survey instrument included four demographic questions and one open-ended question to provide respondents with the opportunity to freely describe their experiences and perceptions related to participating in oral presentations (refer to Table 3.11). Data were collected over a one-month period from 112 undergraduates enrolled in English for Oral Presentations (ELC590) at Academy of Language Studies, UiTM Shah Alam. At the time of data collection, ELC590 was the only oral presentation-focused course offered, as English for Informative Speeches (LCC400), English for Oral Reporting (LCC402), and English for Persuasion (LCC600) were not launched yet. The purposive sampling of this cohort also allowed for an initial and comprehensive examination of the influential factors impacting students' experiences and perceived competence in oral presentations.

Table 3.11
Exploratory Survey Questions

No.	Question	Categories/Question
1	Gender	Male; Female
2	Semester	Semester 1; Semester 2; Semester 3; Semester 4; Semester 5; Semester 6; Semester 7; Semester 8; Semester 9; Semester 10
3	Programme Cluster	Science and Technology; Social Science and Humanities; Business and Management
4	Campus	Shah Alam, Puncak Alam, Puncak Perdana, Sungai Buloh
5	Open-Ended Question	Describe at least two (2) factors that impact you when participating in oral presentations.

The decision to use an open-ended format for this preliminary investigation was guided by the need to capture rich, detailed, and context-specific data (Newton et al., 2024; Rouder et al., 2021) about students' experiences with oral presentations. Unlike closed-ended questions which often limit responses to predefined options, open-ended questions allow respondents to articulate their thoughts, emotions, and experiences in their own words (Singer & Couper, 2017). Hence, this approach is essential for uncovering the potential factors influencing oral presentations that may vary significantly across individuals and contexts.

3.5.2 Data Analysis

Given the exploratory nature of this survey, a qualitative approach was necessary to identify the emergent patterns grounded in undergraduates lived experiences related to oral presentations. The data underwent inductive thematic analysis as per the guidelines proposed by Braun and Clarke (2006), where themes were developed directly from the data without reference to a predefined coding framework. This method allowed for flexibility and openness to student-driven insights.

The initial coding was conducted by the primary researcher through repeated readings of the responses and iterative categorisation of emerging patterns. Codes were refined over several rounds of analysis to enhance internal coherence and interpretive clarity, with themes finalised through a process of reviewing coded extracts across the dataset, checking for internal consistency and distinctiveness, and naming each theme to reflect its conceptual essence (De Paoli, 2024).

Throughout the process, research reflexivity was maintained by documenting coding decisions and theme revisions in analytic memos. Direct quotations were used in the reporting phase to preserve the authenticity of participant voices and support interpretive claims. Although the dataset contained 112 responses, thematic sufficiency was observed as no new themes emerged in the later stages of analysis. This indicates adequate depth for the aims of this preliminary phase. An intercoder reliability check was conducted with two independent coders to assure the trustworthiness of the findings, as detailed in the next section.

3.5.3 Intercoder Reliability Check

An intercoder reliability check was performed to enhance the transparency and trustworthiness of the thematic analysis. This procedure served to assess the consistency of theme identification (Kurasaki, 2000; O'Connor & Joffe, 2020) and reduce the risk of researcher bias (Ruggeri et al., 2011) in interpreting exploratory survey responses. The use of more than one independent coder is widely recommended in qualitative research to enhance credibility, reduce individual bias, and establish intersubjective agreement in theme identification (Mohd Zabidi et al., 2022; O'Connor & Joffe, 2020). In line with these recommendations, two independent coders were recruited to participate in the reliability check.

Both coders hold doctoral degrees with a research background in English language use within professional and academic communication contexts. In addition, they have over five years of experience in teaching language proficiency courses and are actively involved in qualitative research. Their combined disciplinary expertise, contextual familiarity, and qualitative methodological competence made them highly suitable for this role.

The coders were each assigned the same set of responses, which were extracted from the pool of 112 obtained responses. A subset of 24 responses (approximately 21% of the dataset) was selected for the intercoder reliability check, consistent with qualitative research practices that recommend checking a representative sample of the data rather than the full dataset to establish coding consistency (Cofie et al., 2022). These responses were purposefully sampled to represent a diverse range of themes, language styles, and response lengths, ensuring that the coders were exposed to the full breadth of content complexity present in the dataset.

The reliability process followed the procedures outlined by Cofie et al. (2022): (1) received initial briefing to familiarise themselves with the research objectives and coding framework, (2) independently coded the responses, and (3) participated in consensus-building discussions to resolve discrepancies. This iterative approach aligns with the recommendations in ensuring analytical rigour and interpretive alignment.

The comparison revealed that both Coder 1 (CDR1) and Coder 2 (CDR2) independently produced coding results that aligned with the researcher's original coder in 23 out of 24 cases (an agreement rate of 95.83% for each coder). The one instance of divergence for each coder was addressed through a consensus discussion and agreement was reached. The high degree of agreement reflects the clarity of the themes derived during from the inductive thematic analysis. This cross-checking process with two qualified coders supported the trustworthiness of findings presented in the next section.

3.5.4 Exploratory Survey Findings

This subsection presents the thematic findings from the preliminary exploratory survey. All participant responses cited in this section are reproduced verbatim, without grammatical or linguistic correction, to preserve the authenticity of students' perspectives. The responses were analysed using inductive thematic analysis, and an intercoder reliability check was conducted to ensure the trustworthiness of the analysis. Five themes emerged in the thematic analysis: (1) fear of negative feedback, (2) time management, (3) weak language proficiency, (4) reliance on external aids, (5) poor understanding of speech structures. These themes are elaborated below:

3.5.4.1 Theme 1: Fear of Negative Feedback

Many participants described a strong emotional response to perceived evaluation from peers or audiences during oral presentations. Despite being prepared, participants reported losing control of their speech, experiencing physical symptoms of anxiety, or anticipating negative reactions.

"Fear of negative feedback arises when I see another group make a better presentation than me." (P40)

"Usually, I'd be so anxious that I just couldn't fathom anything. This results in me having speaking difficulties and losing my confidence, no matter how ready I am." (P46)

"Negative comments from the panel." (P95)

"I tend to become shy when all eyes are on me, and it makes me tremble, lose my words, and regret everything. Then, the audience starts giving negative comments." (P103)

These quotations reveal how the anticipation of feedback deeply affects students' emotional and cognitive performance, particularly when framed through social comparison and visibility. P40's comment illustrates how witnessing stronger presentations from peers triggered an immediate fear of being judged unfavourably, even before delivering their own. P46 described how anxiety escalated to the point of cognitive paralysis which makes it difficult to access prepared content and causes a complete loss of confidence in the moment. Similarly, P103 associated being observed by an audience with physical reactions like trembling and word loss, ultimately leading to regret and negative self-perception. In these responses, the participants anticipated or experienced feedback not as constructive input, but as a negative reaction.

3.5.4.2 Theme 2: Time Management

Another critical challenge identified by participants was time management. Several students reported that inadequate planning and preparation time directly affected their ability to practise and deliver their presentations effectively.

"I'm bad at time management, so I don't have ample time to practice my presentations." (P23)

"I didn't have enough time to prepare for the presentations…" (P26)

"I didn't have enough time to practice." (P40)

These statements collectively point to a pattern of students struggling to allocate sufficient time for presentation preparation and rehearsal. PT23 acknowledged a personal weakness in managing time, directly linking this to the inability to practise. PT26 and PT40 echoed similar challenges, but without referencing specific causes, implying that external demands or a lack of structured guidance may have contributed to their insufficient preparation. The repetition of "I didn't have enough time" across participants reflects a recurring tension between intention and execution, where students may value preparation but lack the systems or strategies to follow through.

3.5.4.3 Theme 3: Heavy Reliance on Visual Aids

Several participants expressed that their performance during oral presentations was significantly affected by the presence or absence of visual aids. Rather than serving as a support tool, slides appeared to function as a script or crutch. When visual aids were unavailable or malfunctioned, students struggled to adapt, revealing deeper issues related to content ownership and delivery autonomy.

> *"No PowerPoint slides." (P66 and P69)*
>
> *"I cannot see the slides." (P79)*

These quotations highlight the extent to which students rely on visual aids as the primary structure for their oral presentations. PT79's experience of being "thrown off" due to not being able to see the slides suggests that their speech delivery was tethered to the screen, rather than supported by it. For PT66 and PT69, the absence of PowerPoint slides was described not as an inconvenience, but as a major barrier to delivering their content. Collectively, these accounts reveal a dependence on visual prompts that surpasses typical use for audience support, reflecting a lack of autonomous competence in managing content independently.

3.5.4.4 Theme 4: Poor Understanding of Speech Structures

Several participants reported difficulty in structuring their oral presentations. They described this as an unclear process.

> *"Poor understanding of speech structures". (P3, P57, and P65)*
>
> *"Poor understanding of oral presentations" (P45)*
>
> *"For the past oral presentations, I would say that I mess up the flow of the speech very often meaning that the speech is unorganized and I keen to stutter when nervous are overwhelmed me. I became afraid to participate in any oral presentation during those times." (P91)*
>
> *"No guide to give a proper speech structure" (P94)*
>
> *"Have to plan step by step of the content that we want to convey". (P108)*

The above excerpts to a widespread struggle with understanding how to organise ideas effectively in oral presentations. Participants P3, P57, and P65 described their knowledge of speech structures as lacking, while others like P94 and P108 emphasised the absence of instructional guidance or a clear model for planning content. P91 offered a detailed account of how this lack of structure led to disorganised delivery, frequent stuttering, and ultimately, avoidance of participation. The recurring references to speech being "unorganised" having "no guide," or needing "step-by-step" help indicate that many students are not equipped with practical strategies for sequencing ideas which is a key competency for oral presentations.

3.5.4.5 Theme 5: Weak Language Proficiency

Weak language proficiency also emerged as a significant barrier affecting students' participation in oral presentations. Participants described their hesitation and fear of making mistakes, particularly in pronunciation and fluency which often led them to hold back during oral presentations.

"My personal utterances in English…" (P9)

"I'm too scared if I mispronounce something,' (P87)

"I feel less proficient in English, and it holds me back." (P30)

"Lack of fluency is a big problem for me." (P23)

These quotations reveal a common thread of language-related anxiety that directly impacts students' willingness to engage in oral presentations. P9 and P87's fear of mispronouncing words reflects a concern not just with linguistic correctness but with how such errors might be judged by peers or audiences. P30 explicitly connected low English proficiency with avoidance behaviour which indicates that her sense of inadequacy served as a barrier to speaking. Similarly, P23 identified fluency as a central obstacle to expressing ideas clearly, which likely contributes to reduced confidence and hesitation. Across these accounts, the fear of being perceived as incompetent due to language struggles appeared to a significant challenge for the participants.

3.6 Research Instrument Adaptation

The constructs were operationalised using established instruments adapted from prior empirical studies. The preliminary interviews with hiring managers and the exploratory survey with undergraduate students were not used to develop new theoretical constructs. Instead, they informed the contextual adaptation of the questionnaire by confirming the relevance of selected dimensions, guiding the contextual rewording of items, and supporting the development of additional items where the preliminary findings identified behaviours that were not sufficiently represented in the original instruments. Specifically, the hiring managers' emphasis on confidence, message structuring, preparation, and adaptability informed the adaptation of the Oral Presentation Competence Instrument, whereas the exploratory survey findings informed the contextualisation of the Feedback Literacy, Grit, and Intrinsic Motivation scales to better reflect the oral presentation experiences of Malaysian undergraduates. Table 3.12 summarises how the preliminary findings informed the adaptation of the research instrument.

Table 3.12
Mapping of Preliminary Findings to Instrument Adaptation

No.	Preliminary Findings	Construct	Adaptation
1	Confidence	Oral Presentation Competence	Reinforced items on confident delivery (OPC12, OPC22).
2	Message structuring	Oral Presentation Competence	Reinforced content organisation items (OPC1–OPC6).
3	Preparation	Oral Presentation Competence	Reinforced preparedness item (OPC25).
4	Adaptability	Oral Presentation Competence	Reinforced audience engagement and responsiveness (OPC24).
5	Fear of negative feedback	Feedback Literacy / Intrinsic Motivation	Supported Managing Affect (FBL22–FBL26) and Perceived Pressure (IMT11–IMT13).
6	Time management	Grit	Supported perseverance-related items.
7	Reliance on visual aids	Oral Presentation Competence	Reinforced items on reduced dependence on slides and notes (OPC8–OPC9).
8	Poor understanding of speech structures	Oral Presentation Competence	Reinforced content mastery items (OPC1–OPC6).
9	Weak language proficiency	Grit	Supported contextual adaptation of language-specific grit items (GRT1–GRT2).

3.6.1 Items for Demographic Variables

The finalised questionnaire comprised four demographic variables: gender, programme cluster, semester of study, and course enrolment. Gender was included to describe the respondents' demographic profile. Programme cluster categorised students according to the institutional classification used at the data collection site, namely Business and Management, Social Sciences and Humanities, and Science and Technology. This classification aligns with the broader curriculum structure and has been used in previous studies to examine field-specific communication practices (e.g., Zhang & Ardasheva, 2019).

Following the pilot study, semester of study was incorporated into the final questionnaire because the four target oral presentation courses were offered across different semesters depending on the faculty. Collecting this information enabled more

accurate profiling of the respondents and facilitated the reporting of participant characteristics during the fieldwork phase.

The course enrolment variable was included to ensure that only students registered in one of the four target courses were eligible to participate in the study. These courses were selected because they incorporate structured oral presentation tasks that are directly relevant to the objectives of this research. To maintain data integrity, respondents who selected "None of the above" were automatically redirected to the end of the survey to prevent non-relevant responses from being included in the final dataset. Table 3.13 presents the final demographic items and their corresponding response options.

Table 3.13
Items for Demographic Profile

No.	Item Label	Item	Response Options
1	DEM1	Gender	Male; Female
2	DEM2	Programme cluster	Business & Management; Social Science and Humanities; Science & Technology
3	DEM3	Semester	Semester 1; Semester 2; Semester 3; Semester 4; Semester 5; Semester 6; Semester 7; Semester 8; Semester 9; Semester 10
4	DEM4	Course	English for Oral Presentation (ELC590); English for Informative Speeches (LCC400); English for Oral Reporting (LCC402); English for Persuasion (LCC600); None of the above

3.6.2 Scale for Perceived Autonomy Support

This section outlines the instrument used to measure perceived autonomy support. A total of six items were adapted from Jang et al. (2016) to measure perceived autonomy support as a construct in the present study. These items extend the Learning Climate Questionnaire (LCQ) originally developed by Williams et al. (1994) and validated by Williams and Deci (1996). While the original LCQ captures students' general perceptions of autonomy-supportive teaching, Jang et al. (2016) refined the

instrument by embedding it within a dual-process motivation mediation model, arguing that autonomy support and teacher control are distinct constructs that can coexist, refining the instrument by embedding it within a dual-process motivation mediation model. This refinement addresses the limitation of viewing low autonomy support as merely the absence of support, providing deeper understanding of how teacher autonomy support influences students' psychological needs.

Jang et al. (2016) advanced the LCQ by linking autonomy support more explicitly to students' motivational processes within a longitudinal framework. Their revised scale captures not only students' perceptions of lecturer autonomy support but also its role in influencing motivation over time. As the preliminary interviews and exploratory survey did not identify additional autonomy-supportive behaviours beyond those represented in the LCQ, no new items were developed for this construct. Instead, the six items were contextually adapted to reflect lecturer support within oral presentation tasks in Malaysian higher education, thereby ensuring contextual relevance while preserving the conceptual integrity of the original instrument. Table 3.14 presents the finalised survey items used to measure perceived autonomy support in this study.

Table 3.14
Items for Perceived Autonomy Support

Item No	Item Label	Statement	Source
1	PAS1	My lecturer provides me with options for my oral presentations.	Adapted from Jang et al. (2016)
2	PAS2	I felt understood by my lecturer.	
3	PAS3	My lecturer conveys confidence in my ability to do well in this course.	
4	PAS4	My lecturer encourages me to ask questions.	
5	PAS5	My lecturer listens to how I would like to execute my oral presentations.	
6	PAS6	My lecturer tries to understand how I visualise my oral presentation before providing suggestions.	

3.6.3 Scale for Feedback Literacy

This section outlines the instrument used to measure feedback literacy. Various scales in the feedback literacy literature were compared and this study determined three that are most aligned with the research context and objectives.

The first scale is the Feedback Literacy Behaviour Scale (FLBS) by Dawson et al. (2024) while the second scale is the L2 Student Writing Feedback Literacy Scale (L2-SWFLS) by Yu et al. (2022). The third and final scale was the Student Feedback Literacy Instrument (SFLI) developed by Weidlich et al. (2025). All three instruments are grounded in established conceptualisations of feedback literacy and have demonstrated satisfactory psychometric properties through empirical validation. Specifically, the FLBS conceptualises feedback literacy as a set of observable feedback behaviours, the L2-SWFLS frames feedback literacy within second-language writing by emphasising learners' engagement with feedback, whereas the SFLI conceptualises feedback literacy through two broad dimensions of attitudes and practices. Consequently, the principal distinction among these instruments lies in how feedback literacy is conceptualised and operationalised.

First, the FLBS focuses on students' feedback behaviours rather than their perceptions or beliefs only. It assesses how students seek feedback, make sense of it, use it, provide it to others and manage their emotions when receiving it. This characteristic makes it particularly suitable for oral presentation contexts, where behavioural engagement plays a crucial role in effective communication and audience interaction. In contrast, Yu et al.'s L2-SWFLS was developed specifically for second-language academic writing and includes items directly referencing "English writing", "text revision", and "compositions". Although it offers high reliability, its narrow focus on writing feedback makes it less adaptable to oral presentation compared to the FLBS by Dawson et al. (2024).

Second, Weidlich et al.'s SFLI measures two broad aspects of feedback literacy: attitudes and practices. Despite being essential aspects, its two-factor structure lacks the specificity needed to capture the distinct stages of behavioural feedback literacy. It is also designed to be general across disciplines and does not emphasise behaviours as strongly as the FLBS by Dawson et al. (2024).

Third, the FLBS has strong psychometric properties. Dawson et al. (2024) validated the scale through both confirmatory factor analysis and Rasch analysis and reported test–retest reliability ranging from $r = 0.56$ to 0.71 which confirms the stability of the instrument over time. This adds a layer of confidence that has not been reported in either Yu or Weidlich's work.

Taken together, the FLBS was chosen to measure feedback literacy among undergraduates in the oral presentation context. A careful adaptation process was

carried out to ensure that the FLBS was suitable for this study and aligned with the frameworks. This process involved three main steps, adapted from Elangovan and Sundaravel (2021), which involved (1) checking alignment, (2) conducting language modification, and (3) contextualising survey items.

Alignment checking involved reviewing each of the original FLBS items to ensure that they were relevant to the feedback literacy construct as defined in this study. No changes were made to the conceptual structure of the instrument, as its five subconstructs (Seeking Feedback, Making Sense of Feedback, Using Feedback, Providing Feedback, and Managing Affect). The FLBS's structure which comprises five clearly defined dimensions also aligns with key feedback literacy models in the literature, particularly those that emphasise self-regulation in the feedback loop (Molloy et al., 2020). Together, these represent a cyclical and interactive process.

Language modification was then carried out to ensure contextual relevance. Terms such as *my work* or *my assignments* were replaced with *my oral presentations*. For example, an original item stating, "I reflect on the quality of my work after receiving feedback" was adapted to, "I reflect on the quality of my oral presentations after receiving feedback." This step ensured that respondents would interpret the items in a way that matched the intended context.

Contextual enrichment constituted the final stage of the adaptation process. During the adaptation process, it was identified that the original FLBS did not explicitly capture certain peer feedback behaviours commonly practised during oral presentation activities, particularly the use of assessment rubrics when providing feedback and the practice of cross-checking feedback before sharing it with peers. To better reflect the collaborative nature of oral presentation tasks in Malaysian higher education, two additional items (FBL18 and FBL20) were incorporated under the Providing Feedback dimension. These additions complemented the original FLBS without altering its underlying conceptual structure and enhanced the contextual relevance of the instrument for the present study.

The survey items for the feedback literacy constructs are presented in Table 3.15. Six items were used to measure the Seek Feedback Information subconstruct (Items 1 to 6), Make Sense of Information (Items 7-10), and Use of Feedback (Items 11 to 15). The remaining two subconstructs are Provide Feedback and Manage Affect which have six (Items 16-21) and five items (Items 22-26), respectively.

Table 3.15
Items for Feedback Literacy

Item No	Subconstruct	Item Label	Statement	Source
1	Seek Feedback Information	FBL1	I reflect on the quality of my oral presentations after receiving feedback.	Adapted from Dawson et al. (2024)
2		FBL2	I use my reflection as a source of information to improve my oral presentations.	
3		FBL3	I seek out examples of good work to improve my oral presentation.	
4		FBL4	I listen or read thoughtfully when other people provide me with input about my oral presentation.	
5		FBL5	I consider comments I have received on similar tasks when I am working on my oral presentations.	
6		FBL6	I ask for comments about specific aspects of my oral presentations.	
7	Make Sense of Information	FBL7	I carefully consider comments about my presentations before deciding if I will use them or not.	Adapted from Dawson et al. (2024)
8		FBL8	I determine which feedback I will use when receiving conflicting feedback about my oral presentations.	
9		FBL9	I consider the credibility of the feedback about my oral presentations.	
10		FBL10	I consider how comments relate to rubrics of the oral presentations.	
11	Use of Feedback	FBL11	I check whether my presentation is better after I have acted on the feedback.	Adapted from Dawson et al. (2024)
12		FBL12	I use comments on my presentation to refine my understanding of what good quality presentation looks like.	
13		FBL13	I plan how I will use them to improve my future presentations.	
14		FBL14	I keep comments on previous presentations to use again in the future.	
15		FBL15	I use feedback to enhance my current oral presentation.	

Item No	Subconstruct	Item Label	Statement	Source
16	Provide Feedback	FBL16	I offer constructive feedback when commenting on others' oral presentations.	Adapted from Dawson et al. (2024)
17		FBL17	I comment on other people's oral presentations when I am invited to.	
18		FBL18	I take the initiative to refer to rubrics when commenting on other people's oral presentations.	Developed for the present study
19		FBL19	I offer to provide feedback to my peers.	Adapted from Dawson et al. (2024)
20		FBL20	I try to be very clear when providing feedback to others.	
21		FBL21	I cross-check my feedback about others' oral presentations.	Developed for the present study
22	Manage Affect	FBL22	I am open to reasonable criticism about my oral presentations.	Adapted from Dawson et al. (2024)
23		FBL23	I deal well with any negative emotional responses I have to feedback information.	
24		FBL24	When a feedback message is valuable but upsetting or annoying, I still find a way to make use of it	
25		FBL25	I feel motivated to improve my oral presentations when I receive constructive feedback.	
26		FBL26	I fully utilise the feedback received even if it is negative.	

This instrument is believed to be comprehensive for measuring how students engage with feedback. The next section outlines the instrument adaptation process for the third latent construct in this study which is grit.

3.6.4 Scale for Grit

This study synthesised items from three validated scales to operational and measure grit in the current research setting. The scales used were the Short Grit Scale (Grit-S) by Duckworth and Quinn (2009), the L2 Grit Scale by Teimouri et al. (2020), and the Multi-Dimensional Scale of Grit (MDSG) by Singh and Chukkali (2021). The integration of the three grit scales was undertaken to capture both the domain-general and language-specific dimensions of grit. This approach was adopted because recent studies have questioned the adequacy of relying on a single grit instrument to explain learning behaviours across different educational and cultural contexts. For instance, Datu et al. (2023) reported that the contribution of consistency of interest to academic outcomes varies across contexts, while Xu et al. (2023) argued that cultural factors influence how grit is expressed and interpreted in learning. In addition, Teimouri et al. (2022) demonstrated that language-specific grit provides stronger predictive power than domain-general grit in second-language learning. Therefore, integrating items from multiple validated instruments enabled the present study to capture a broader and more contextually relevant representation of grit in oral presentation settings.

Given these limitations, this study incorporated items from the L2 Grit Scale which is a language-specific instrument developed to measure grit in second language acquisition. Teimouri et al. (2022) demonstrated that L2 grit significantly outperformed domain-general grit in predicting language motivation, attention, and achievement which underline the value of using language-specific measures in the oral presentation research context. This study also integrated items from the MDSG by Singh and Chukkali (2021) to reflect culturally responsive expressions of grit relevant to Malaysia's collectivist educational values.

The adaptation process was completed in three phases, adapted from Elangovan and Sundaravel (2021): (1) alignment checking, (2) language modification, and (3) contextual enrichment. First, relevant items from the three instruments were mapped to the context of oral presentation competence while ensuring alignment with the conceptual definition of grit adopted in this study. Second, language modification involved rephrasing general references (e.g., "learning English") into context-specific references to oral presentations to improve content validity. For example, the original item, "I put much time and effort into improving my English language weaknesses,"

was adapted to "I put time and effort into improving my English language weaknesses to improve my oral presentations."

Finally, the exploratory survey findings were used to further contextualise the instrument. One participant highlighted the importance of continuously practising English despite not coming from a language background, stating, "I don't come from a language background but…you have to practice in whatever language that you are studying for" (P3). This finding supported the contextual adaptation of the two language-specific grit items (GRT1 and GRT2) adapted from Teimouri et al. (2022), as they reflected students' perseverance in continuously improving their English proficiency to support oral presentation performance. No additional grit dimensions or items were developed because the original conceptual structure adequately represented the construct.

The final grit instrument consisted of 13 items classified under two subconstructs: (1) Perseverance of Effort and (2) Consistency of Interest. Perseverance of Effort (POE) refers to the tendency to sustain effort and remain committed to completing oral presentations despite challenges. In contrast, Consistency of Interest (COI) captures the degree to which students maintain long-term focus and passion for oral presentations without becoming distracted. A total of nine items measured reflected the POE subconstruct while the remaining four items operationalised the COE subconstruct. The items measuring grit are presented in Table 3.16.

Table 3.16
Items for Grit

Item No	Subconstruct	Item Label	Statement	Source
1	Perseverance of Effort	GRT1	I work hard to learn English to improve my oral presentations.	Adapted from Teimouri et al. (2022); Contextual relevance supported by exploratory survey
2	Perseverance of Effort	GRT2	I put time into improving my English language weaknesses to improve my oral presentations. .	
3	Consistency of Interest	GRT3	I am always interested to learn about oral presentations.	Adapted from (Duckworth & Quinn, 2009a)
4	Perseverance of Effort	GRT4	I always ensure that I maintain my focus when learning about oral presentations.	
5	Consistency of Interest	GRT5	I have many ideas that I will always add into my oral presentation.	
6	Consistency of Interest	GRT6	I often set a goal for my oral presentations.	
7	Perseverance of Effort	GRT7	I always ensure that I do not get distracted from my oral presentations.	
8	Perseverance of Effort	GRT8	I am dedicated to completing all tasks for my oral presentations.	
9	Consistency of Interest	GRT9	I take the initiative to construct new ideas for my oral presentations.	
10	Perseverance of Effort	GRT10	I am committed to doing my best in my oral presentations.	
11	Perseverance of Effort	GRT11	I am dedicated to completing all tasks for my oral presentations.	Adapted from Singh and Chukkali (2021)
12	Perseverance of Effort	GRT12	I put in significant effort for my oral presentations.	
13	Perseverance of Effort	GRT13	I will not allow anything to stop my learning progress of oral presentations.	

3.6.5 Scale for Intrinsic Motivation

To measure intrinsic motivation in this study, items were adapted from the Intrinsic Motivation Inventory (IMI) developed by Ryan (1982) and later expanded by Ryan and Deci (2000). The IMI is a multidimensional instrument rooted in Self-Determination Theory (SDT) and is designed to assess respondents' subjective experiences with respect to target tasks.

The IMI has been validated across numerous contexts such as water conservation (Gibson et al., 2024) and sports (Cocca et al., 2022) which demonstrates sound psychometric properties. A study by Monteiro et al. (2015) supported the instrument's multidimensional structure which allowed for both general intrinsic motivation and specific subconstructs to be meaningfully interpreted. Similarly, Bosch (2024) validated the IMI in technology-mediated learning environments and reported high construct validity and internal reliability (α=.75 to .92). These studies conclude that the IMI is effective in capturing learner engagement in tasks requiring autonomy and sustained effort.

Importantly, the validity of the IMI has also been established in the Malaysian educational context. In a study conducted among Form One students, Eow et al. (2010) adapted and validated the Bahasa Malaysia version of the IMI to assess intrinsic motivation in an ICT literacy class. Their findings confirmed the reliability (α=.844 overall) and construct validity of the instrument which concluded that the IMI was a reliable, valid, and contextually appropriate tool for assessing intrinsic motivation.

The adaptation process involved three main steps, adapted from Elangovan and Sundaravel (2021): (1) alignment checking, (2) language modification, and (3) contextualisation of survey items. Generic references (e.g., "this activity") were replaced with "oral presentations" to ensure item relevance. Particular attention was given to the Perceived Usefulness subconstruct to ensure that the adapted items reflected the role of oral presentations in professional readiness, including communication confidence, employability, and workplace communication. This contextualisation was informed by the preliminary interviews with hiring managers, which consistently highlighted these competencies as important workplace expectations. The adaptation was undertaken while preserving the conceptual structure of the Intrinsic Motivation Inventory and maintaining alignment with Self-Determination Theory.

The adapted IMI used in this study comprised a total of 17 items distributed across five subconstructs. The Perceived Enjoyment subconstruct consisted of four items (IMT1 to IMT4) that captures students' affective responses and interest in oral presentation. The Perceived Competence subconstruct included three items (IMT5 to IMT7), measuring students' self-appraisals of their skills and confidence in presentations. The Perceived Importance subconstruct was represented by three items (IMT8 to IMT10) assessing the value and effort students placed on doing well in oral presentations. The Perceived Pressure subconstruct contained three items (IMT11 to IMT13) to gauge the emotional tension or relaxation experienced during presentations. Finally, the Perceived Usefulness subconstruct comprised four items (IMT14 to IMT17) which evaluated students' perceptions of the relevance of oral presentation skills to future academic and professional contexts. The items measuring this construct are presented in Table 3.17.

Table 3.17
Items for Intrinsic Motivation

Item No	Sub Construct	Item Label	Statement	Source
1	Perceived Enjoyment	IMT1	I enjoy preparing for my oral presentations	Adapted from Ryan and Deci (2000)
2		IMT2	I enjoy myself when I am presenting.	
3		IMT3	I would describe oral presentation as very interesting.	
4		IMT4	I find oral presentations to be quite enjoyable.	
5	Perceived Competence	IMT5	I believe I am quite good at oral presentations.	Adapted from Ryan and Deci (2000)
6		IMT6	I believe I become more competent in oral presentations as I work more.	
7		IMT7	I am satisfied with my performance in oral presentations.	
8	Perceived Importance	IMT8	I put a lot of effort in my oral presentations.	Adapted from Ryan and Deci (2000)
9		IMT9	I tried very hard for my oral presentations.	
10		IMT10	It was important for me to do well at oral presentations.	
11	Perceived Pressure	IMT11	I did not feel nervous for my oral presentations.	Adapted from Ryan and Deci (2000)
12		IMT12	I was relaxed in doing my oral presentations.	
13		IMT13	I feel excited to share my oral presentation content to the audience.	
14	Perceived Usefulness	IMT14	I believe oral presentations could be of some value to me.	Adapted from Ryan and Deci (2000); Contextual relevance supported by interview with hiring managers
15		IMT15	I think that oral presentations are useful for me to prepare to enter the employment sector.	
16		IMT16	I believe oral presentation is important to do because it can improve my communication skills	
17		IMT17	I believe that oral presentation is important to help me develop my confidence.	

3.6.6 Scale for Oral Presentation Competence

In this study, oral presentation competence was conceptualised as the dependent variable and operationalised through three key subconstructs: presentation content, multimodal competence, and professionalism, as per the Oral Presentation-Multimodal Framework (Radzuan et al., 2023). This tripartite structure captures both observable and self-perceived behaviours essential for oral presentations. The instrument was developed by adapting and integrating items from various sources to ensure contextual sensitivity and construct breadth.

This process involved three main steps, adapted from Elangovan and Sundaravel (2021): (1) alignment checking, (2) language modification, and (3) contextualisation of survey items. First, items were adapted from Chiang et al. (2022), Radzuan et al. (2023), and Tsang (2020). Integrating multiple validated sources enhanced the breadth of construct coverage while ensuring alignment with the conceptualisation of oral presentation competence adopted in this study. Second, language modification involved refining the wording of the original items to better reflect oral presentation practices in Malaysian higher education. For example, the broad statement "I present clearly" was adapted to the more specific and observable statement "I always ensure that the content of the presentations aligns with the topic."

Finally, contextual enrichment was undertaken based on the preliminary interviews with hiring managers. The interviews consistently identified confidence, message structuring, preparation, and adaptability as essential workplace expectations for effective oral presentations. These findings informed the development and contextual adaptation of selected oral presentation competence items, particularly those relating to confident delivery (e.g., OPC16, OPC22), audience engagement (e.g., OPC24), and preparation (e.g., OPC25). This ensured that the adapted instrument reflected both the theoretical dimensions of oral presentation competence and the expectations of workplace communication.

This 25-item instrument encompassed three interrelated subconstructs that reflect the key dimensions of oral presentation competence. The first subconstruct, presentation content (OPC1-OPC6) captures the extent to which students ensure their presentations are clear, well-organised, aligned with the topic, and supported by evidence. The second subconstruct, multimodal competence (OPC7-OPC19) assesses students' delivery skills through various expressive modalities such as ability to control

vocal elements. The third subconstruct, professionalism (OPC20-OPC25) reflects the aspects of presentation delivery. The items measuring this construct are presented in Table 3.18.

Table 3.18
Items for Oral Presentation Competence

Item No	Sub-Construct	Item Label	Statement	Source
1	Presentation Content	OPC1	I always ensure that the content of the presentations aligns with the topic.	Adapted from Chiang et al. (2022)
2		OPC2	I always ensure that the content of the presentations is clear.	
3		OPC3	I always ensure that the content of the presentations is organised.	
4		OPC4	I always ensure that the presentations contain correct information.	
5		OPC5	I always ensure that key points are highlighted in my oral presentations.	
6		OPC6	I always ensure that my key points are supported by evidence.	
7	Multimodal Competence	OPC7	I can apply appropriate and better eye contact with the audience for my oral presentations.	Adapted from Radzuan et al. (2023)
8		OPC8	I do not rely much on slides for my oral presentations.	
9		OPC9	I do not read from notes for my oral presentations.	
10		OPC0	I can project my voice clearly for my oral presentations.	
11		OPC11	I can speak with enthusiasm for my oral presentations.	
12		OPC12	I can demonstrate confidence for my oral presentations.	
13		OPC13	I can include good use of visual aids, graphics and slides for my oral presentations.	

Item No	Sub-Construct	Item Label	Statement	Source
14		OPC14	I can integrate technological tools for my oral presentations.	
15		OPC15	I can incorporate effective gestures for my oral presentations.	
16		OPC16	I have a good control of my physical movement and body positioning during my oral presentations.	Adapted from Radzuan et al. (2023); Contextual adaptation informed by preliminary interviews
17		OPC17	I know when to pause and stress for emphasis during my oral presentations.	Adapted from Tsang (2020)
18		OPC18	I make the effort to reduce any fillers during my oral presentations.	
19		OPC19	I have good fluency for my oral presentations.	
20	Professionalism	OPC20	I adhere to the time limit during my oral presentations.	Adapted from Radzuan et al. (2023)
21		OPC21	I ensure that I dress appropriately for my oral presentations.	
22		OPC22	I always show confidence during presentations even though I am nervous.	Adapted from Tsang (2020); Contextual adaptation informed by preliminary interviews
23		OPC23	I always research topics that may appeal to the audience for my oral presentations.	
24		OPC24	I always engage with the audience during the Q&A session.	Adapted from Chiang et al. (2022); contextual adaptation informed by preliminary interviews
25		OPC25	I always prepare for my oral presentation in advance.	

3.7 Measurement of the Research Instrument

Measurement refers to the process of systematically assigning numerical values to variables in measuring a specific phenomenon of interest (Slater & Hasson, 2024). As Plant et al. (2018) explain, this process involves deliberate and systematic observations of the real world which form the foundation of empirical research.

The demographic section included three variables measured using a nominal scale: gender (male; female), programme cluster (science and technology; social science and humanities; business and management), and course enrolled (ELC590; LCC400; LCC402; LCC600). A new variable was added after the pilot study, semester (Semesters 1-10), and was measured using an ordinal scale. These four variables were included to describe the sample population and examine potential subgroup differences despite them not part of the structural model (Robinson, 2017).

This study investigated five latent constructs which are perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. To measure these constructs, a 10-point interval scale was employed across all questionnaire items, with responses ranging from 1 (*strongly disagree*) to 10 (*strongly agree*). Interval scale is a scale that has constant and equidistant distant between values (Marateb et al., 2014). The adoption of the 10-point interval scale is sound for several reasons: (1) it captures a broader range of response variance, thus, enabling finer differentiation among respondents' perceptions (Coelho & Esteves, 2007); (2) it improves measurement sensitivity and precision (Preston & Colman, 2000); (3) it helps mitigate response biases (Awang et al., 2016); (4) it supports the assumptions underlying parametric and advanced statistical analyses (Hair et al., 2010). Moreover, the use of a 10-point scale is widely recommended in studies employing structural equation modelling (SEM) as it increases the reliability and accuracy of measuring latent constructs (Ferrante et al., 2021).

The 10-point interval scale utilised in this study was classified as a continuous variable, a critical assumption for employing parametric methods such as SEM. Treating the scale as continuous enables the application of parametric techniques such as SEM which require certain assumptions to be met. These include: (i) independence of observations which means that each response is collected independently; (ii) identical distribution, and (iii) normality (Awang, 2015). Violations of these assumptions can compromise the validity of the statistical inferences drawn. Therefore, this study took

deliberate steps to ensure that these assumptions were met to ensure the appropriateness of the dataset for SEM analysis. Building upon this measurement, the next section elaborates on the expert review process to establish content and face validity.

3.8 Expert Review of the Research Instrument

Expert review has long been recognised as critical in survey development, particularly for identifying issues related to item clarity, construct alignment, logical sequencing, and potential measurement error (Artino et al., 2023; Pino et al., 2023). This process is vital when instrument developers become overly familiar with the content and may overlook ambiguous or problematic items. Expert reviews may be conducted individually or through a structured panel approach (Wilson, 2014). Independent reviewers, therefore, offer an objective perspective to enhance item quality and ensure alignment with the study objectives.

In this study, a structured individual review method was employed, with six experts engaged to evaluate the content validity of the instrument, Oral Presentation Competence Inventory (OPCI), across six sections which are demographic, perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. The panel consisted of two content experts in verbal communication (SSH and NSD), two experts in research methodology and statistical analysis (MHH and FHM), and two language experts from a public university's language faculty (MMN and PPL). All reviewers are senior academicians with doctoral qualifications and more than ten years of experience in Malaysian public or private universities. They were also well-published in peer-reviewed academic journals and demonstrated expertise relevant to the study's domain.

Each expert received a content rating review form (Appendix 5) via email/WhatsApp which included the cover page, instructions, and the research instrument. Experts were instructed to evaluate each item based on its clarity, relevance, technical accuracy, and alignment with its respective construct. Specifically, they rated 88 questionnaire items using the following four-point Likert scale to indicate relevance: 1=Not Important, 2= Moderately Important, 3=Important, and 4=Very Important, as recommended by Yusoff et al. (2019) and Said et al. (2022). In addition to the ratings, they were invited to provide open-ended comments on items deemed unclear,

redundant, or ambiguous, along with suggestions for improvement to ensure greater clarity and conciseness.

Following the review, the researcher compiled and synthesised all expert feedback, which included both ratings and comments gathered through email and WhatsApp correspondence. The Content Validity Index (CVI) was then calculated to quantify the degree of agreement among experts and determine the adequacy of each item. The CVI is a quantitative measure of an assessment instrument's relevance and representativeness to the content domain (Almanasreh et al., 2019; Waltz & Bausell, 1981). Studies such as Saiful Bahry et al. (2021) and Mason et al. (2020) have employed this method to operationalise content validity in similar contexts and is strongly recommended by scholars such as Kipli and Khairani (2020) due to its reliability. According to Polit et al. (2007), a CVI of 0.70 or above is considered acceptable as it indicates satisfactory content validity. Table 3.19 through Table 3.23 present the content validity index (CVI) results for each of the five constructs evaluated.

Table 3.19
Content Validity Index (CVI) for Perceived Autonomy Support

Perceived Autonomy Support Items	**Expert 1 (SSH)**	**Expert 2 (NSD)**	**Expert 3 (MHH)**	**Expert 4 (FHM)**	**Expert 5 (MMN)**	**Expert 6 (PPL)**
Items rated 'Not important' and "Moderately important"	0	0	0	0	0	0
Items rated "Important" and "Highly important'	6	6	6	6	6	6
Total Initial Items	6	6	6	6	6	6
Content Validity Index	1.00	1.00	1.00	1.00	1.00	1.00

Table 3.20
Content Validity Index (CVI) for Feedback Literacy

Feedback Literacy Items	**Expert 1 (SSH)**	**Expert 2 (NSD)**	**Expert 3 (MHH)**	**Expert 4 (FHM)**	**Expert 5 (MMN)**	**Expert 6 (PPL)**
Items rated 'Not important' and "Moderately important"	2	0	1	0	0	4
Items rated "Important" and "Highly important'	24	26	25	26	26	21
Total Initial Items	26	26	26	26	26	26
Content Validity Index	0.92	1.00	0.96	1.00	1.00	0.80

Table 3.21
Content Validity Index (CVI) for Grit

Grit Items	Expert 1 (SSH)	Expert 2 (NSD)	Expert 3 (MHH)	Expert 4 (FHM)	Expert 5 (MMN)	Expert 6 (PPL)
Items rated 'Not important' and "Moderately important"	0	0	0	0	0	2
Items rated "Important" and "Highly important'	14	14	14	14	14	12
Total Initial Items	14	14	14	14	14	14
Content Validity Index	1.00	1.00	1.00	1.00	1.00	0.85

Table 3.22
Content Validity Index (CVI) for Intrinsic Motivation

Intrinsic Motivation Items	Expert 1 (SSH)	Expert 2 (NSD)	Expert 3 (MHH)	Expert 4 (FHM)	Expert 5 (MMN)	Expert 6 (PPL)
Items rated 'Not important' and "Moderately important"	0	0	0	0	1	0
Items rated "Important" and "Highly important'	13	13	13	13	12	13
Total Initial Items	13	13	13	13	13	13
Content Validity Index	1.00	1.00	1.00	1.00	0.92	1.00

Table 3.23
Content Validity Index (CVI) for Oral Presentation Competence

Oral Presentation Competence Items	Expert 1 (SSH)	Expert 2 (NSD)	Expert 3 (MHH)	Expert 4 (FHM)	Expert 5 (MMN)	Expert 6 (PPL)
Items rated 'Not important' and "Moderately important"	0	0	0	0	1	0
Items rated "Important" and "Highly important'	26	26	26	26	25	26
Total Initial Items	26	26	26	26	26	26
Content Validity Index	1.00	1.00	1.00	1.00	0.96	1.00

The content validity index (CVI) scores for the five constructs in this study ranged from 0.85 to 1.00. All CVI values exceeded the recommended minimum threshold of 0.70, indicating that the items were deemed content-valid by a panel of experts (Polit et al., 2007). Accordingly, the expert review process confirmed the adequacy and relevance of the instrument items for measuring the intended constructs.

Although no items were recommended for deletion, several were flagged for revision based on expert feedback. Specifically, items rated as "moderately important" or "not important" were retained, but suggestions for rewording were provided to improve clarity and alignment. One expert, NSD, recommended standardising the "leading statements" across items within each construct. A leading statement refers to the consistent introductory phrase that precedes each item. For instance, item PAS3 was revised from" My lecturer conveys confidence in my ability to do well in my oral presentation" to "I feel confident in my ability to do well in my oral presentations as conveyed by my lecturer" to improve consistency and clarity.

In addition, concerns were raised about the use of discipline-specific jargon such as "rubric" and "fillers" which may be unfamiliar to some respondents. Experts also highlighted that certain items were overly wordy or syntactically complex. This could potentially pose comprehension challenges for respondents with varying levels of English proficiency. Therefore, one content expert (SSH) recommended referring to the Common European Framework of Reference for Languages (CEFR) throughout the item revision process to guide vocabulary choices and ensure linguistic appropriateness across all items. Revisions were made accordingly to enhance clarity, accessibility, and suitability for the target respondent group. These modifications aimed to enhance item clarity, reduce ambiguity, and align language with the respondents' proficiency levels. The complete list of modifications made are presented in Appendix 6.

3.9 Pre-Testing of Research Instrument

Pretesting is essential in questionnaire design to assess the latency of respondents' response, readability, and comprehensibility of survey items (Hilton, 2017). These aspects are important because lengthy response times may indicate difficulties in interpreting items (Shi et al., 2018), while poor readability and comprehensibility can lead to misunderstanding of the intended constructs (Lenzner,

2012). Consequently, pretesting helps identify and rectify potential issues before the questionnaire is administered to the target population.

Pretesting can uncover errors that may not be apparent to researchers but are noticeable to the target population (Bolton, 1993; Ikart, 2019). Grimm (2010a) emphasises that pretesting evaluates the strengths and weaknesses of the survey by detecting inappropriate items in the item wording, errors in survey items, unsuitable order of items, disorganised layout, ambiguous instructions and other issues that may prevent respondents from answering specific items. During pretesting, respondents are encouraged to provide comments, inputs, concerns, or issues on each survey item to enhance data quality and increase respondent engagement (Colbert et al., 2019; Presser et al., 2004).

In line with the recommendation, the present study conducted both types of pre-tests sequentially, starting with the participatory test and followed by the undeclared test. The 88-item questionnaire was pretested over one month with undergraduates taking English for Oral Presentations (ELC590), English for Informative Speech (LCC400), and English for Oral Reporting (LCC402) at a language faculty in a public university in Selangor, Malaysia. This allows sufficient time for instrument refinement for the pilot study based on respondent feedback.

In the participatory pretest, respondents were informed that the pretest is a trial run for the study and of the research objectives. In addition to completing the questionnaire, they participated in short interview sessions after the survey completion to gather opinions on the clarity of the items and format of the questionnaire. In the undeclared pretest, respondents answered the questionnaire without prior knowledge of the research objectives during the undeclared pretest. This method allows for an unbiased evaluation of response patterns, the clarity of survey items, and the overall standardisation of the instrument (Czaja & Blair, 2005).

3.9.1.1 Participatory Pre-Testing

The participatory pre-testing involved 30 respondents who voluntarily participated. They were informed of the research objectives and that this was a practice run (Czaja & Blair, 2005). First, the respondents were given time to complete the questionnaire, and their completion time was recorded. Using their personal devices, 18 respondents completed the online survey in 10 minutes, while the remaining 12

respondents took 15 minutes. After a short break and obtaining verbal consent, each respondent participated in a five-minute semi-structured individual interview to share their opinions about the survey, as recommended by Buschle et al. (2022).

The respondents provided valuable feedback concerning the clarity and wording of several survey items. Specifically, some respondents highlighted words they found ambiguous terminology, such as the word “plan” in the item, “I receive suggestions to improve my presentation from my lecturer after I have shared my plan.” Furthermore, Respondent 4 remarked that one item was overly lengthy. In response, the item “I feel very encouraged to share with my lecturer how I would like to conduct my oral presentation” was revised to “My lecturer listens to how I would like to conduct my oral presentations” to enhance clarity. Following these amendments, the revised items were subjected to undeclared pre-testing to further assess their comprehensibility and suitability, as described in the following section.

3.9.1.2 Undeclared Pre-Testing

Following revisions from the participatory pre-test, undeclared pretesting was conducted whereby respondents answer with no prior brief of the research objectives and that it is a practice run (Czaja & Blair, 2005). This pre-test was disseminated to 60 respondents, yielding 30 responses (a 50% response rate), aligning with Perneger et al.'s (2015) recommendation that a minimum of 30 respondents is sufficient to detect common issues in questionnaire design. Respondents completed the questionnaire in its original format to evaluate the clarity of the survey items. The results indicated some variations in responses which suggest differing interpretations of certain items. Additionally, a readability rating scale from 1 (strongly disagree) to 10 (strongly agree) was added for each section. Table 3.24 presents the descriptive statistics for the undeclared pre-test which report the mean and standard deviation for each construct. The high mean values across all constructs suggest that respondents found the survey items comprehensible and relevant.

Table 3.24
Descriptive Statistics for Undeclared Pre-Testing

No.	Construct	Mean	Standard Deviation
1	Perceived Autonomy Support	9.16	1.12
2	Feedback Literacy	9.07	1.03
3	Grit	9.50	0.79
4	Intrinsic Motivation	9.48	0.79
5	Oral Presentation Competence	9.50	0.88

Also, an additional open-ended question, *Please provide any comments about this section if you have any*, was included at the end of the questionnaire. Overall, the feedback from the respondents was positive. For example, Respondent 12 noted that the instrument was well-written and easy to understand. Additionally, the feedback highlighted that the layout of the questionnaire was tidy and easy to navigate. The colour scheme of the online survey was also reported by the respondents to be visually comfortable. Furthermore, they stated that the cover page and instructions provided in each section were concise and clear. However, one constructive suggestion was provided by Respondent 16 who recommended that "the owner of the Google Form may show the progress bar so that the respondent would know how many sections to be answered". In response to this feedback, the progress bar feature was activated in the final Google Form questionnaire to enhance respondents' awareness of their completion status throughout the survey.

Altogether, the pre-test results confirmed that all 88 items were suitable for research. Also, the pre-test observed that the time taken by each respondent to answer the questionnaire was between 10 and 15 minutes which is a reasonable time frame (Galesic & Bosnjak, 2009). With these refinements made through pretesting, the questionnaire was then piloted. The next section will discuss the pilot study conducted to assess the factor structure of the questionnaire.

3.10 Pilot Data Collection and Analysis Procedures

A pilot study is a small-scale study conducted to assess the feasibility of the research design and refine the data collection instruments (Eldridge et al., 2016; van Teijlingen & Hundley, 2002). It plays a crucial role in improving the quality of research instruments and ensuring the validity of fieldwork data. According to In (2017), pilot

studies help identify necessary modifications before conducting a full-scale study, especially when hypothesis testing is involved. The following section details the data collection and analysis procedures for the pilot study.

3.10.1 Pilot Data Collection

For the pilot study, a two-stage probability sampling approach was employed to ensure efficiency of estimates and represent the target population (Thomas, 2007; Valliant et al., 2013). The first stage utilised stratified random sampling technique. In this stage, a comprehensive list of classes from the four targeted courses was obtained: ELC590 (English for Oral Presentations), LCC400 (English for Informative Speeches), LCC402 (English for Oral Reporting), and LCC600 (English for Persuasion).

In the second stage, simple random sampling was employed to select individual students from the ten pre-selected classes. A random number generator was used for the selection process, allowing each student an equal probability of participation. The online pilot survey link was distributed via students' university email addresses obtained from the faculty administrative office. The email also included a research brief, the researcher's credentials, and a confidentiality statement. Additionally, university ethical approval was attached in the email to assure respondents of the authenticity of the study. Intermittent email reminders were sent to the respondents throughout the two-month data collection period to enhance response rates. A total of 152 responses were received at the end of the data collection period. However, 19 responses were removed for various reasons as reported in Table 3.25.

Table 3.25
Reason for Deletion of Pilot Survey Responses

No.	Reason	No of Responses
1	Ineligibility of respondents	2
2	Incomplete responses	11
3	Potential outliers	6

Response deletion occurred for three reasons: ineligibility (2 responses from students not enrolled in targeted courses were filtered out at survey onset), incomplete responses (11 responses removed from pilot data), and response bias (6 responses removed for selecting identical answers across all items). After removing 19 responses,

133 valid responses were retained, yielding a 66.5% response rate. This rate is considered acceptable for exploratory factor analysis (Hertzog, 2008; Johanson & Brooks, 2010; Teare et al., 2014). The procedures for exploratory factor analysis are explained in the next section.

3.10.2 Data Screening and Cleaning Procedures

Data screening and cleaning are essential steps in preparing a dataset for statistical analysis to ensure its accuracy and validity (Huebner et al., 2020; Meyers et al., 2017). Petersen and Ekstrøm (2019) highlight that before proceeding with advanced statistical techniques, datasets should be examined for potential issues. Conducting these procedures reduces the risk of errors that could compromise the integrity of the findings, particularly in inferential analyses (Lee et al., 2021; Wang & Wang, 2020). The tests conducted include missing value analysis, assessment of outliers, and normality test which were recommended in the literature (Jin, 2022; Kwak & Kim, 2017; Lusa et al., 2024; Watkins, 2021).

After the completion of pilot data collection, the dataset underwent three stages of screening and cleaning: (i) analysis of missing values, (ii) assessment of outliers, and (iii) testing for normality. The following subsection explains the first procedure, which is the analysis of missing values.

3.10.2.1 Missing Value Analysis

Missing values are defined as the absence of responses to the survey items in the questionnaire (Mirzaei et al., 2022). Addressing missing values is crucial for ensuring data integrity as incomplete datasets can lead to biased parameter estimates (Mavridis & White, 2020; Vach & Blettner, 1991) and reduced statistical power (Acock, 2005; Kwak & Kim, 2017). According to Acuña and Rodriguez (2004), missing data can be interpreted along a continuum: if less than 1%, it is typically negligible, below 5% is considered manageable whereas missingness exceeding 15% necessitates the use of advanced statistical remedies. Given these considerations, a systematic process was undertaken to detect and handle missing values in the data.

The first step taken involved implementing a structured data tracking system using Microsoft Excel where each response was assigned a unique identifier to facilitate

missing value detection. The dataset was then examined for missing values (blank response) and out-of-range scores that exceeded the defined interval scale of 1 (strongly disagree) to 10 (strongly agree) using the frequency analysis function in IBM SPSS 25.0. Based on the results generated by the IBM-SPSS 25.0 software, all data for 88 items in the pilot study were entered completely and correctly, as no values fell outside the expected range of between 1 and 10. Moreover, the analysis revealed no missing observations in the pilot data file as all items recorded consistent 133 responses (n =133). Since the dataset was verified to be clean and complete, the next step was to identify outliers, as explained in the next section.

3.10.2.2 Assessment of Outliers

Outliers are data points that deviate significantly from the overall distribution and can be classified as univariate outlier or multivariate outlier (Epstein, 2023). Univariate outliers refer to extreme values in a single variable (Leys et al., 2019), whereas multivariate outliers exhibit unusual combinations of scores across multiple variables (El-Masri et al., 2021). The presence of outliers in a data set can potentially distort parameter estimate which lead to model misspecification and compromise statistical conclusions (Zijlstra et al., 2011). Recognising this risk, Paltridge (2015) stresses the importance of identifying outliers prior to conducting statistical analyses as contaminated datasets may yield misleading results.

To address outlier contamination, the study first screened univariate outliers in 133 responses using boxplots as suggested by Schwertman et al. (2004) and Mowbray et al. (2019). Univariate outliers are categorised as either mild or extreme based on Interquartile Range (IQR) thresholds. Mild outliers, indicated by circles or open dots in the boxplot, are 1.5 IQR above or below the interquartile range. Extreme outliers which are 3.0 IQR beyond the quartiles are indicated by asterisks. Mild outliers are typically retained as they seldom violate statistical assumptions whereas extreme outliers are generally removed to safeguard the integrity of the dataset (Osborne & Overbay, 2004).

A boxplot analysis was conducted for all survey items and identified a small number of mild outliers but no extreme outliers. As mild outliers often reflect natural variations within the dataset rather than errors (Gibbert et al., 2021), all data points were retained to preserve the integrity of the sample. Figure 3.3 illustrates the boxplot of oral

presentation competence, confirming the absence of both mild and extreme outliers in the dependent variable.

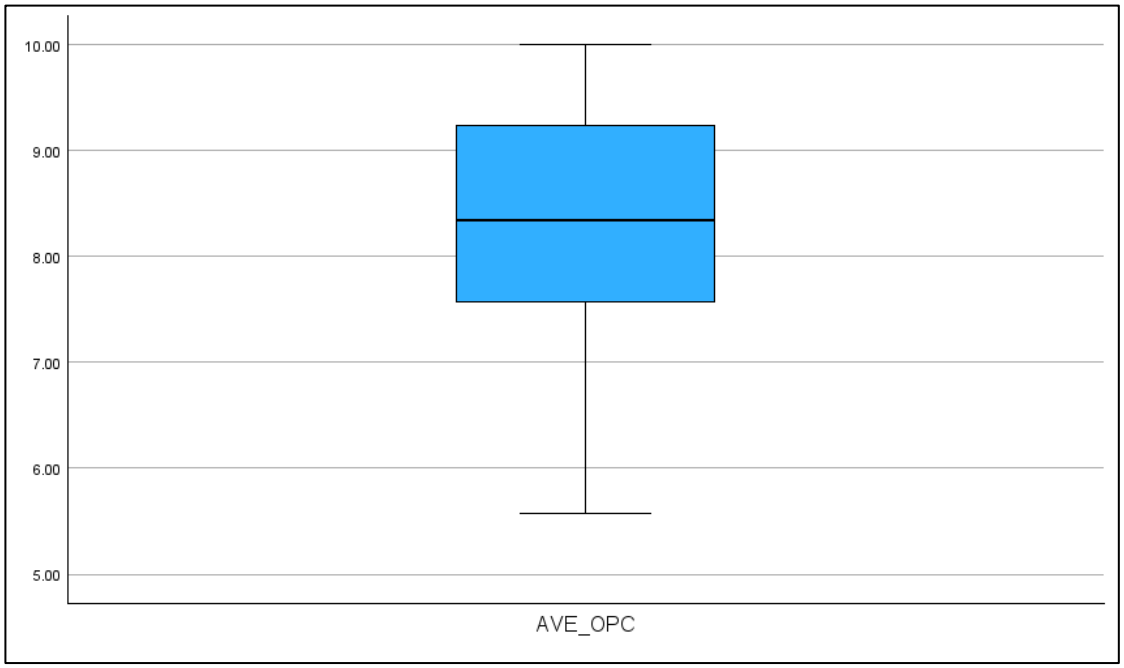


Figure 3.3 Boxplot of Oral Presentation Competence

Multivariate outliers were assessed using Mahalanobis Distance (MD), a statistical measure that identifies cases with unusually large distance from the centroid of the data distribution (Ghorbani, 2019; Hair et al., 2010; Leys et al., 2019). The analysis was conducted in IBM SPSS 29.0 and the MD values were compared against the critical Chi-square (X^2) threshold at $p<0.001$ based on the guidelines by Wang et al. (2014) and Tabachnick and Fidell (2019).

Given that this dataset contained 88 items, the corresponding degrees of freedom (df=88) yielded a critical X^2 value of 87.43. This threshold was obtained using an online chi-square calculator. Any case with an MD score exceeding 87.43 would be classified as a multivariate outlier and subject to removal. The results indicated that no responses in the pilot dataset exceeded this threshold. The highest MD observed was 40.69 (Case 35) which is well below the cutoff value. Consequently, the dataset was deemed free from multivariate outliers and deemed suitable for subsequent normality assessment.

3.10.2.3 Normality Test

Ensuring data normality is critical as many statistical tests are sensitive to deviations from this assumption (Rani Das, 2016). In this study, normality was assessed using descriptive statistics, graphical methods, and statistical tests to provide a comprehensive evaluation of the dataset.

As the pilot study was conducted primarily to evaluate the reliability, validity, and clarity of the research instrument rather than to test the structural model, univariate normality assessment was considered sufficient to identify any substantial departures from normality at the item level prior to fieldwork (Kamath et al., 2025; Tabachnick & Fidell, 2019). In contrast, the field study served as the basis for covariance-based structural equation modelling (CB-SEM), necessitating multivariate normality assessment because it is a key assumption underlying CFA and SEM analyses (Hair et al., 2010).

Descriptive statistics, including the mean, standard deviation, skewness, and kurtosis, were examined for all 88 survey items across the five study constructs, namely perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence, using the pilot dataset (N=133). The mean values ranged from 3.69 to 8.75, while standard deviation varied between 1.124 and 1.216. Skewness values ranged from -0.512 to 0.210 and kurtosis values ranged from -0.102 to 0.417. According to Awang (2015), data can be considered approximately normal when skewness values fall within ±1.0. Thus, these results suggest that the data distribution was approximately normal with no major deviations.

Graphical techniques were also employed to supplement the statistical descriptors. Histograms (Henderson, 2006), normal probability plot (Habibzadeh, 2024; Q. Zhao & Liang, 2022), and the detrended normal Q-Q plot (Loy et al., 2016) were generated to visually inspect the shape and spread of the data. Histograms provide a visual representation of distribution symmetry, while Q-Q plots assess the alignment between observed and expected quantiles (Yang & Berdine, 2021).

To illustrate the distribution of the pilot data, the graphical assessment of normality was presented using the dependent variable, oral presentation competence, as a representative example. This approach was adopted to avoid presenting repetitive graphical outputs for all constructs while demonstrating that the pilot data exhibited no substantial departures from normality. The graphical normality assessments for the

remaining constructs are provided in Appendix 7 for reference. As shown in Figure 3.4, the histogram displayed a roughly symmetrical shape, suggesting no major deviations from normality. Likewise, the normal Q-Q plot (Figure 3.5) exhibited a moderately straight line, further supporting the assumption of normality (Zhao & Liang, 2022). In addition, the detrended normal Q-Q plot (Figure 3.6) showed no significant clustering of points, with most values scattered randomly around the zero line, thereby reinforcing the graphical evidence of normality (Polyzos et al., 2007).

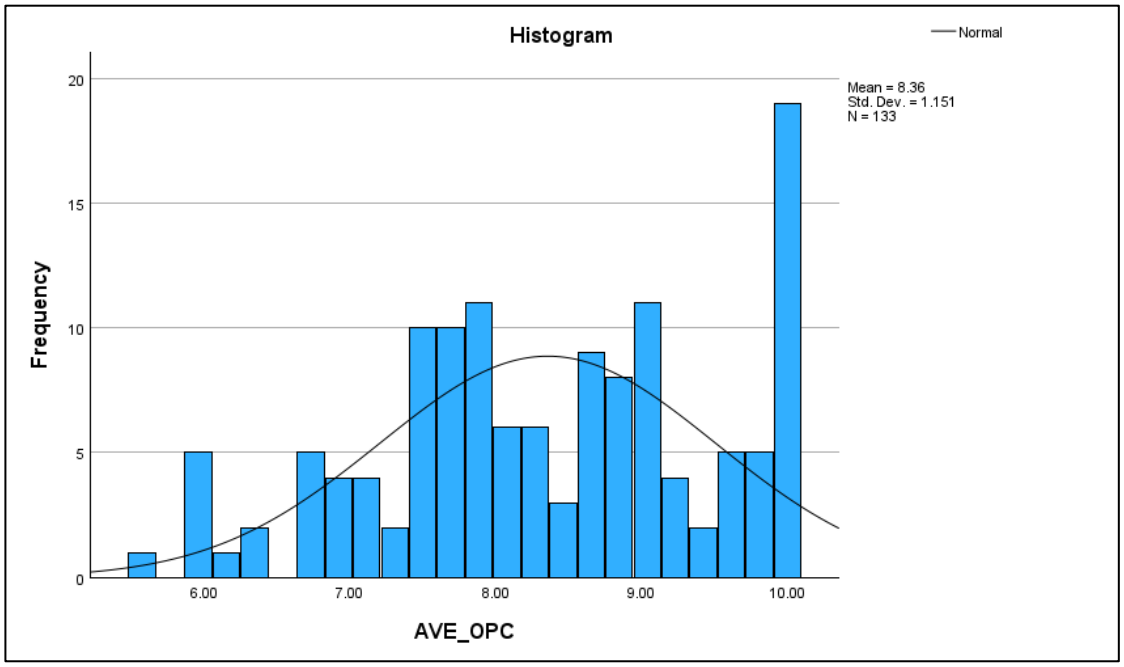


Figure 3.4 Histogram for Oral Presentation Competence

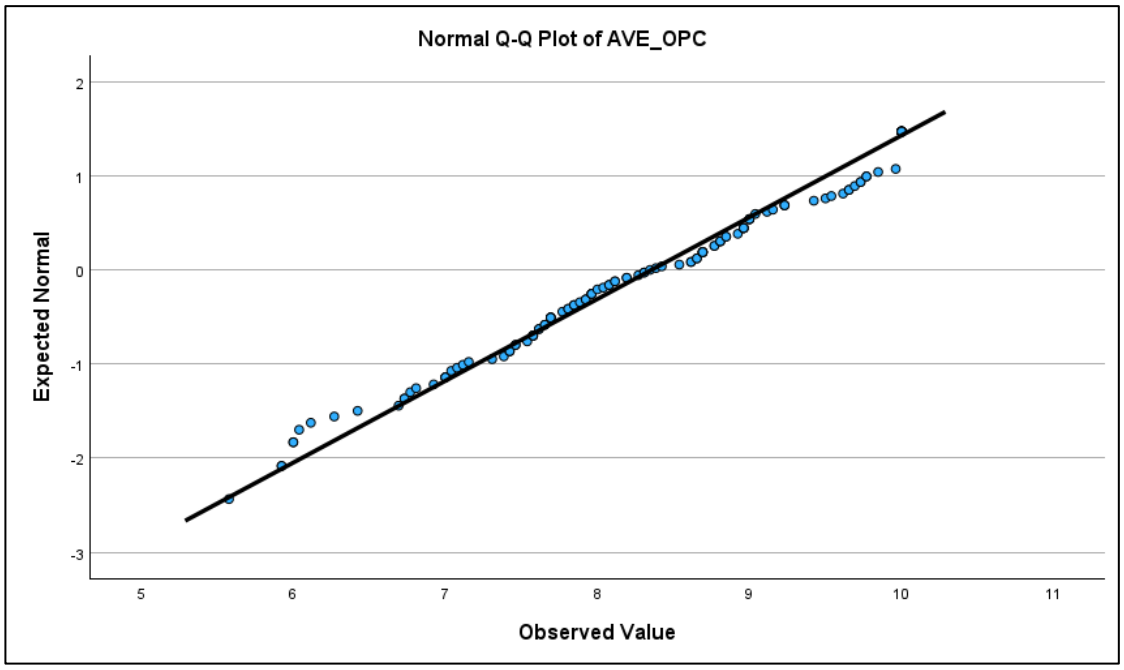


Figure 3.5 Normal Probability Plot for Oral Presentation Competence

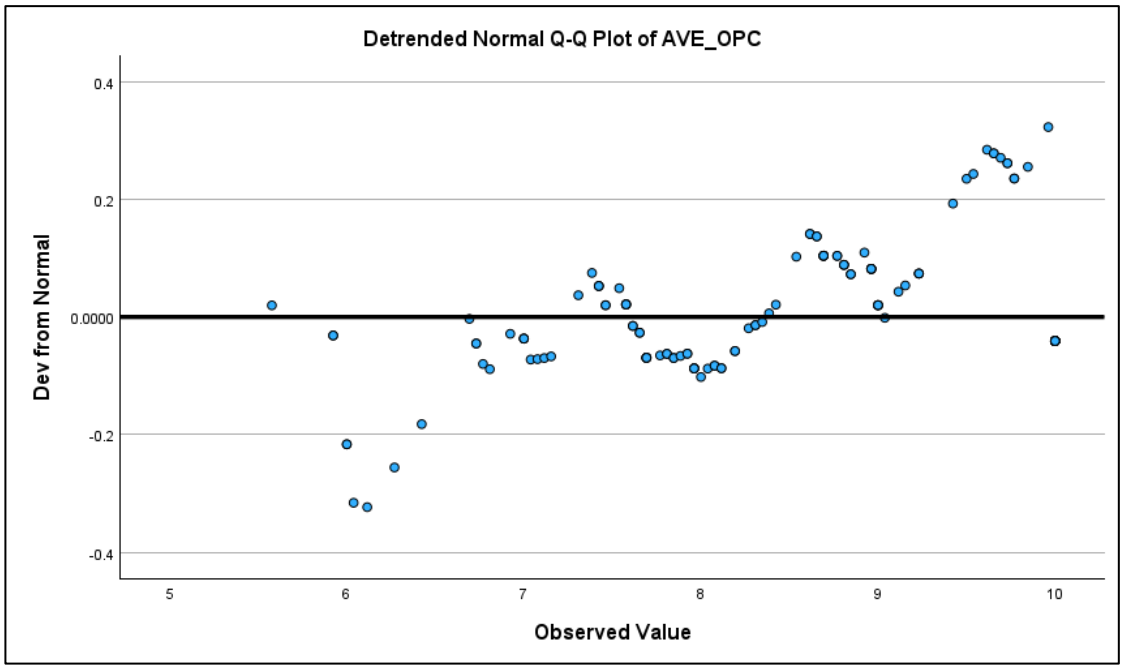


Figure 3.6 Detrended Normal Q-Q Plot for Oral Presentation Competence

3.10.3 Exploratory Factor Analysis Procedures

Exploratory factor analysis (EFA) is a multivariate statistical method used to identify latent constructs underlying a set of measured variables (Reio & Shuck, 2015; Schreiber, 2021). EFA explores factor structures without imposing a predefined number of factors which allows researchers to detect patterns among variables (Alavi et al., 2020b). By grouping correlated items, it reduces dimensionality (Barendse et al., 2015), identifies redundancies (Watson, 2017), and enhances the instrument's internal reliability (Norze & Cater, 2021; Vuong, 2023).

Accordingly, this study employed EFA to determine the underlying dimensions of the factors influencing undergraduates' oral presentation competence using cleaned pilot data (133 responses). The analysis followed a structured five-step process adapted from Williams et al. (2010) as illustrated in Figure 3.7 and are elaborated further in the next subheadings.

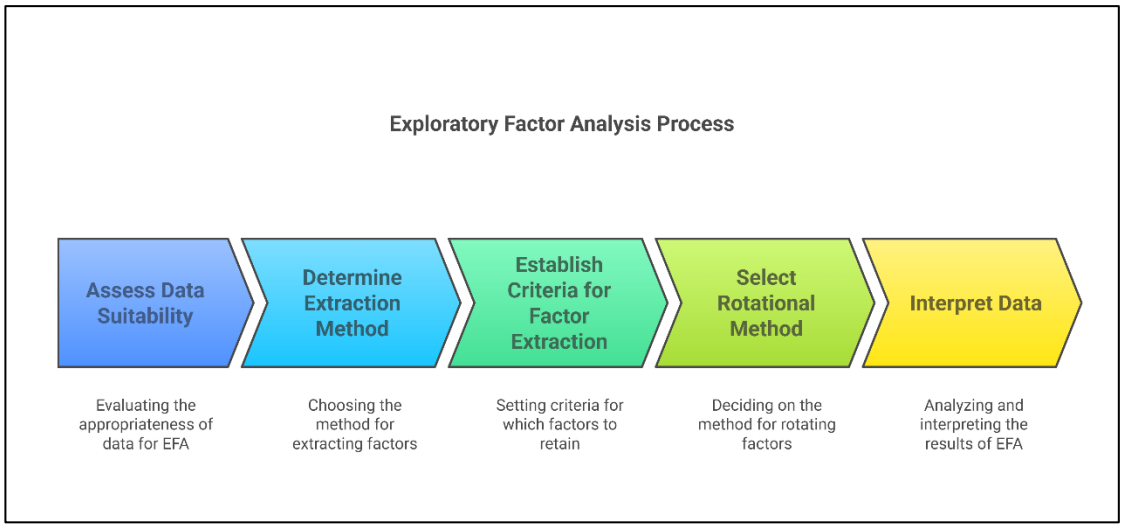


Figure 3.7 Overview of Exploratory Factor Analysis Procedures

3.10.3.1 Step 1: Assessing Data Suitability

The first step of EFA is ensuring data suitability, a prerequisite for conducting exploratory factor analysis (EFA). This study employed two diagnostic tests to assess this: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO test assesses whether the dataset contains sufficient shared variance for factor extraction (Şahan et al., 2019). A KMO value above 0.50 is considered minimally acceptable (Williams et al., 2010) while values above 0.70 indicate strong sampling adequacy (Limone et al., 2021; Nkansah, 2018).

Complementing this, Bartlett's test of sphericity determines whether significant correlations exist among variables, ensuring that factor analysis is appropriate (Abdrbo et al., 2021). A significant result ($p<0.001$) confirms that the correlation matrix is not an identity matrix, thereby supporting the use of factor analysis (Awang, 2015; Yong & Pearce, 2013). To ensure methodological rigor in EFA, any constructs that demonstrated weak correlations or inadequate sampling adequacy were reconsidered prior to the factor extraction phase outlined in Step 2.

3.10.3.2 Step 2: Determine Extraction Method

The second step is factor extraction which is a critical step in exploratory factor analysis (EFA), as the chosen method significantly influences the resulting factor structure and interpretability (Awang, 2015; Iantovics et al., 2019). Several extraction

methods are available in the literature including Principal Component Analysis (PCA), Principal Axis Factoring (PAF), and Unweighted Least Squares. In comparison with other extraction methods, PCA is widely employed in exploratory factor analysis due to its computational efficiency and ability to summarise large datasets (Beattie & Esmonde-White, 2021; Mabel & Olayemi, 2020).

In this study, PCA was selected as the extraction method due to its capacity to maximise the total variance captured in the dataset. This approach effectively reduces multicollinearity and enhances the interpretability (Park et al., 2002). Compared to other methods, PCA provides more stable factor loadings (De Winter & Dodou, 2016), improves estimates accuracy (Wentzell et al., 2021) and mitigates certain computational biases (Kao & Van Roy, 2013). By extracting maximum variance in sequential components, PCA condenses a large set of observed variables into a smaller number of meaningful dimensions (Li & Qin, 2024; Tabachnick & Fidell, 2019).

This process facilitated the identification of underlying dimensions influencing undergraduates' oral presentation competence in the pilot phase. Following the selection of PCA as the factor extraction method, the next step involved determining suitable criteria for factor retention to ensure that only statistically meaningful items were retained for further analysis.

3.10.3.3 Step 3: Establish Criteria for Factor Extraction

Factor extraction in exploratory factor analysis (EFA) aims to identify an optimal number of latent constructs by reducing a large set of observed variables into a smaller and interpretable structure (Williams et al., 2010). As recommended by Awang (2015) and Hair et al. (2010), multiple criteria should be used for factor retention to avoid over- or under-extraction. Therefore, this study employed three established criteria: (1) Kaiser's Criterion (eigenvalue > 1) and (2) cumulative percentage of variance, and (3) the Scree Test.

Kaiser's Criterion suggests retaining factors with eigenvalues greater than 1, as such factors explain more variance than a single observed variable (Awang, 2015; Brown, 2001) and offer computation simplicity (Braeken & Van Assen, 2017). However, this approach has received criticism in the literature for its tendency to overestimate the number of factors, especially in large datasets (Yang & Xia, 2015). To address this limitation, the cumulative percentage of variance explained was used as an

additional measure which ensures that the retained factors accounted for at least 60% of the total variance which is the recommended threshold in social science research (Sigudla & Maritz, 2023; Williams et al., 2010).

In addition, the Scree Test, originally proposed by Cattell (1966), provides a graphical method for identifying the appropriate number of factors. This involves plotting eigenvalues against factor numbers to locate the "elbow point" where the curve levels off which indicates diminishing returns for subsequent factors (Del Giudice, 2022; Everitt & Dunn, 2001).

Collectively, all three criteria were applied collectively to enhance decision reliability. Following factor retention, the next step involved selecting an appropriate rotational method to improve factor interpretability.

3.10.3.4 Step 4: Select Rotational Method

The fourth stage involves selecting an appropriate rotational method as it enhances the interpretability of factor structures without altering the underlying relationships between variables (Nájera et al., 2023; Schmitt & Sass, 2011). Rotation redistributes variance among extracted factors and improves clarity by maximising high factor loadings while minimising cross-loadings.

Two main types of rotation are commonly used which are orthogonal and oblique (Rennie, 1977). Oblique rotation allows factors to correlate which makes it more suitable when latent constructs are theoretically interdependent (Costello & Osborne, 2005) yet can complicate interpretation due to cross-loadings (Fabrigar et al., 1999). In contrast, orthogonal rotation assumes that extracted factors are uncorrelated, simplifying interpretation by producing statistically independent factors which is used for EFA (Gorsuch, 1983, 1988; Taherdoost et al., 2014).

There are four orthogonal techniques: varimax, equamax, orthomax, and quartimax (Williams et al., 2010). Varimax is the most widely used due to its ability to maximise variance within factors while minimising complexity (Gerbing & Hamilton, 1996; Rohe & Zeng, 2023). Therefore, this study employed varimax rotation as it is particularly effective in producing factor solutions with minimal cross-loading. Hence, this ensures clearer factor differentiation in a multidimensional model. With the rotational method established, the final step involved interpreting and labelling the extracted to ensure alignment with the theoretical constructs.

3.10.3.5 Step 5: Interpret Data

The final stage of the exploratory factor analysis (EFA) involved factor interpretation which entails scrutinising factor loadings and assigning meaningful labels to the identified constructs. Factor loadings represent the strength of association between each variable and its respective factor (D'agostino & Russell, 2005; Tavakol & Wetzel, 2020). Higher loadings indicate stronger alignment, and thus greater interpretive clarity (Hair et al., 2010). Hence, items with factor loadings below 0.60 were removed, following the threshold recommended by Hair et al. (2010) and Cleare et al. (2018). Although lower cutoffs (e.g., 0.40 or 0.50) are sometimes acceptable depending on sample size and study purpose (Tabachnick & Fidell, 2019), a 0.60 threshold was chosen in this study to retain only items with substantial explanatory power (Awang, 2015) and to minimise measurement error (Taherdoost et al., 2014).

Furthermore, cross-loaded items, which are variables with significant loadings on more than one factors (Maskey et al., 2018), were automatically excluded in this study. This decision is made because cross-loadings introduce conceptual ambiguity which compromises the distinctiveness of constructs and inflates model fit indices in confirmatory factor analysis (CFA) (Li et al., 2020). Therefore, by systematically removing low-loading and cross-loaded items, this study ensured that the final factor structure was statistically robust. The EFA results for all five constructs are presented in Chapter 5.

3.10.4 Exploratory Factor Analysis Results of Pilot Study

This section presents the exploratory factor analysis (EFA) conducted on the pilot data (133 responses) to examine the underlying factor structure of the instrument. The analysis was performed on five constructs central to the study: perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. The next section presents the EFA results of the first construct, perceived autonomy support.

3.10.4.1 Perceived Autonomy Support

An exploratory factor analysis (EFA) was conducted to examine the latent structure of perceived autonomy support. As shown in Table 3.26, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.869 which exceeds the recommended threshold of 0.6 (Awang, 2015; Hair et al., 2010; Limone et al., 2021; Williams et al., 2010). This indicates that the dataset was suitable for factor analysis. Additionally, Table 3.26 demonstrates that Bartlett's Test of Sphericity was significant (X^2=425.804, p<0.001), which confirms sufficient inter-item correlations for factor extraction (Awang, 2015; Gie Yong & Pearce, 2013; Williams et al., 2010).

Table 3.26
KMO and Bartlett's Test for Perceived Autonomy Support

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.869
Bartlett's Test of Sphericity	Approx. Chi-Square	425.804
	df	15
	Sig.	<.001

Table 3.27 demonstrates that a single-factor solution emerged from the factor extraction, with an eigenvalue of 4.003, explaining 66.71% of the total variance which surpasses the threshold of 60% (Sigudla & Maritz, 2023; Williams et al., 2010).

Table 3.27
Total Variance Explained for Perceived Autonomy Support

Total Variance Explained

	Initial Eigenvalues			**Extraction Sums of Squared Loadings**		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.003	66.708	66.708	4.003	66.708	**66.708**

Extraction Method: Principal Component Analysis

The scree plot analysis (Figure 3.8) further supported this one-factor structure as the elbow point is observed after the one-component mark on the X-axis.

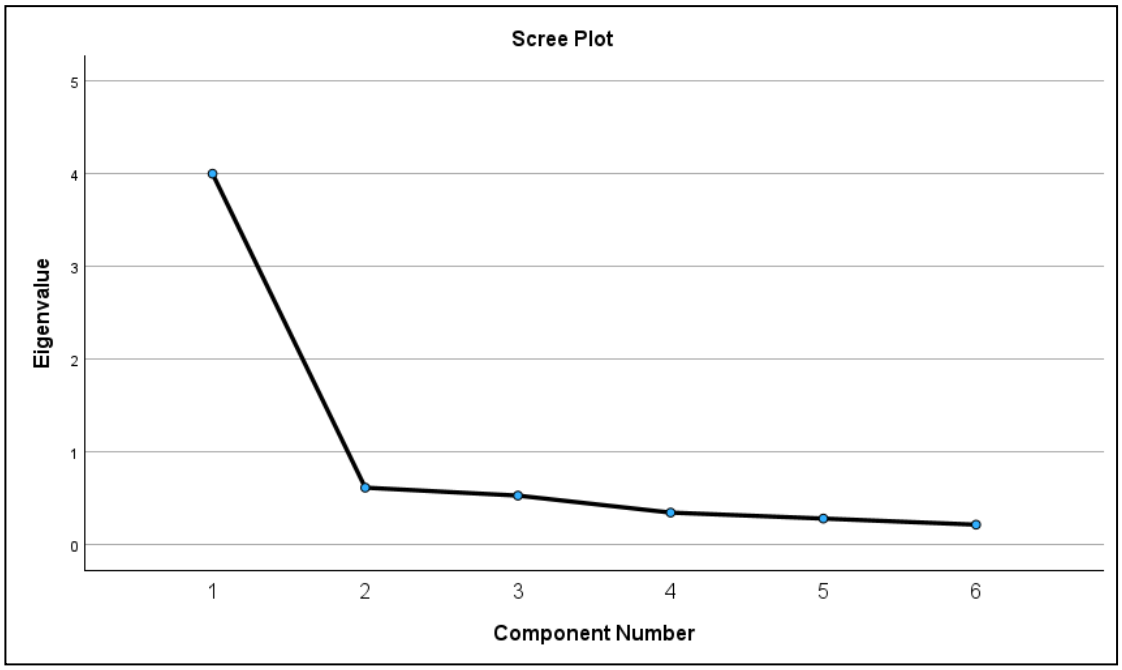


Figure 3.8 Scree Plot for Perceived Autonomy Support

The component matrix results in Table 3.28 demonstrated all six retained items had higher loadings ranging from 0.721 to 0.884 which surpassed the 0.6 benchmark for item retention (Awang, 2015; Hair et al., 2010; Williams et al., 2010). As all items met the minimum threshold of 0.6, no items were removed from the construct.

Table 3.28
Component Matrix for Perceived Autonomy Support

Component Matrix		
Item	**Statement**	**Component 1**
PAS1	I am provided with different ideas for my oral presentations by my lecturer.	.721
PAS2	I felt that my lecturer understood my needs while I was preparing for my oral presentations	.857
PAS3	I feel confident in my oral presentations due to my lecturer's encouragement.	.808
PAS4	I am encouraged by my lecturer to ask questions while preparing for my oral presentations.	.767
PAS5	I feel my lecturer values my preferences for conducting my oral presentations.	.852
PAS6	I feel my lecturer considers my vision for my oral presentations before giving suggestions.	.884

The final set of retained items and their respective loadings are presented in Table 3.29. The strongest loading was observed for PAS6 (0.884) which reflects students' perception that their lecturer considers their vision for oral presentations before providing suggestions. Conversely, PAS1 (0.721), which refers to lecturers providing different ideas for students' oral presentations, showed the lowest but still substantial loading.

Table 3.29
Final Items for Perceived Autonomy Support

Item No	Item Label	Statement	Component 1
1	PAS1	I am provided with different ideas for my oral presentations by my lecturer.	.721
2	PAS2	I felt that my lecturer understood my needs while I was preparing for my oral presentations	.857
3	PAS3	I feel confident in my oral presentations due to my lecturer's encouragement.	.808
4	PAS4	I am encouraged by my lecturer to ask questions while preparing for my oral presentations.	.767
5	PAS5	I feel my lecturer values my preferences for conducting my oral presentations.	.852
6	PAS6	I feel my lecturer considers my vision for my oral presentations before giving suggestions.	.884

These finding confirm that perceived autonomy support is a valid, significant, and unidimensional construct. The next section presents the EFA results for the second construct, feedback literacy.

3.10.4.2 Feedback Literacy

An exploratory factor analysis (EFA) was conducted to examine the latent structure of feedback literacy. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.942 which exceeded the recommended threshold of 0.6 (Awang, 2015; Hair et al., 2010; Limone et al., 2021; Williams et al., 2010). This indicates that the sample was highly suitable for factor analysis. Additionally, Table 3.30 presents that Bartlett's Test of Sphericity was significant (X^2=353.922, p<0.001) (Awang, 2015; Gie Yong & Pearce, 2013; Williams et al., 2010), confirming the presence of sufficient correlations among items to justify factor extraction.

Table 3.30
KMO and Bartlett's Test for Feedback Literacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.942
Bartlett's Test of Sphericity	Approx. Chi-Square	353.922
	df	325
	Sig.	<.001

As shown in Table 3.31, the initial factor extraction revealed three components with eigenvalues greater than 1. The first factor accounted for 31.80%, the second for 20.64%, and the third for 20.06% of the variance, collectively explaining 72.49% of the total variance which surpasses the threshold of 60% (Sigudla & Maritz, 2023; Williams et al., 2010).

Table 3.31
Total Variance Explained for Feedback Literacy

Total Variance Explained

	Initial Eigenvalues			**Extraction Sums of Squared Loadings**			**Rotation Sum of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.915	61.211	61.211	15.915	61.211	61.211	8.267	31.796	31.976
2	1.784	6.861	68.172	1.784	6.861	68.072	5.366	20.640	52.436
3	1.149	4.421	72.493	1.149	4.421	72.493	5.215	20.057	**72.493**

The scree plot, as in Figure 3.9, further validated a three-factor solution as the elbow point flatlined at the fourth component mark. This structure indicates that feedback literacy comprises multiple dimensions rather than a single unidimensional construct.

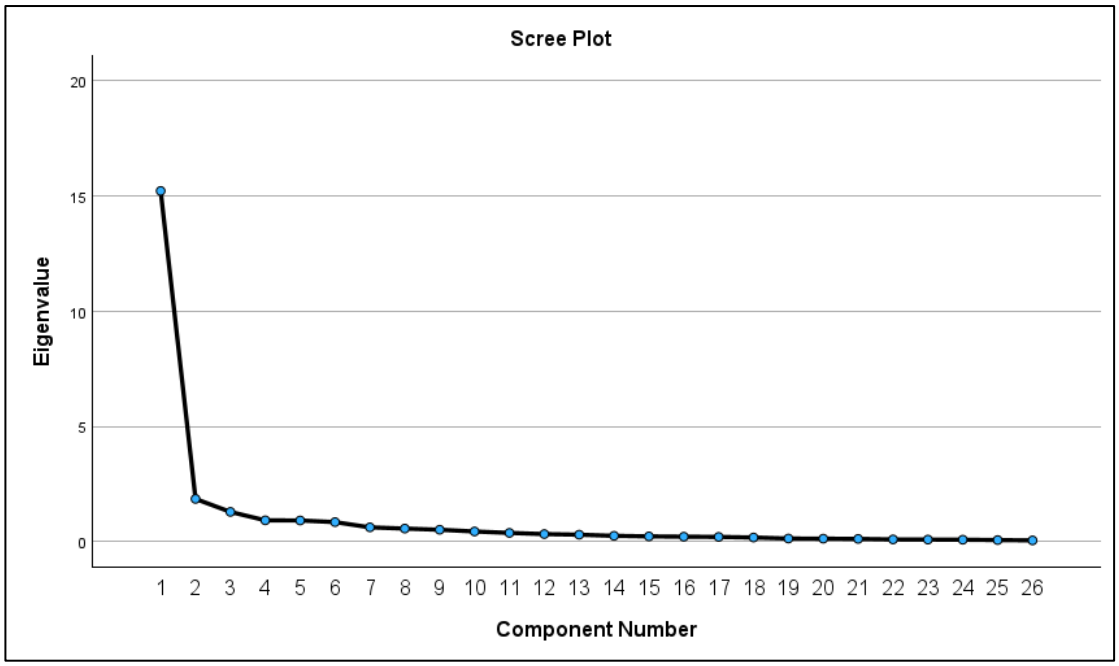


Figure 3.9 Scree Plot for Feedback Literacy

Upon examining the rotated component matrix, Table 3.32 shows that 22 items were retained across three factors which ranged from 0.609 to 0.802. Altogether, these items surpassed the 0.6 benchmark for item retention (Awang, 2015; Hair et al., 2010; Williams et al., 2010).

Table 3.32
Rotation Component Matrix for Feedback Literacy

Item Label	Item Statement	Rotated Component Matrix		
		Component		
		Component 1	Component 2	Component 3
FBL1	I reflect on the quality of my oral presentations after receiving feedback.	.685		
FBL2	I use my reflection as a source of information to improve my oral presentations.	.748		
FBL3	I seek out examples of good work to improve my oral presentation.	.766		
FBL4	I listen or read thoughtfully when other people provide me with input about my oral presentations.	.645		
FBL5	I consider comments I have received on similar tasks when I am working on my oral presentations.	.738		
FBL6	I ask for comments about specific aspects of my oral presentations.	.623		
FBL7	I carefully consider comments about my presentations before deciding if I will use them or not.	.739		
FBL8	I determine which feedback that I will use when receiving conflicting feedback about my oral presentations.	.771		
FBL9	I consider the credibility of the feedback about my oral presentations.		**Factor Loading <0.6**	
FBL10	I consider how comments relate to rubrics of the oral presentations.	.753		
FBL11	I check whether my presentation is better after I have acted on the feedback.		.620	
FBL12	I use comments on my presentation to refine my understanding of what a good quality presentation looks like.	.739		
FBL13	I plan how I will use them to improve my future presentations.	**.664**	**.623**	

		Rotated Component Matrix		
Item Label	**Item Statement**	**Component**		
		Component 1	**Component 2**	**Component 3**
FBL14	I keep comments on previous presentations to use again the in future.		.610	
FBL15	I use feedback to enhance my current oral presentation.	**.669**	**.609**	
FBL16	I offer constructive feedback when commenting on others' oral presentations.			.767
FBL17	I comment on other people's oral presentations when I am invited to.			.802
FBL18	I take the initiative to refer to rubrics when commenting on other people's oral presentations.			.709
FBL19	I offer to provide feedback to my peers.			.690
FBL20	I try to be very clear when providing feedback to others.			.651
FBL21	I cross-check my feedback about others' oral presentations.			.676
FBL22	I am open to reasonable criticism about my oral presentations.		.639	
FBL23	I deal well with any negative emotional responses I have to feedback information.		.651	
FBL24	I find ways to use feedback constructively even if it is negative.		.629	
FBL25	I feel motivated to improve my oral presentations when I receive constructive feedback.		**Factor Loading <0.6**	
FBL26	I fully utilise the feedback received even if it is negative.		.789	

Note: "-" indicates that the item did not achieve minimum factor loading of 0.6

As shown in Table 3.33, four items were removed (FBL9, FBL13, FBL15, and FBL25). Items FBL9 (*I consider the credibility of the feedback about my oral presentations*) and FBL25 (*I feel motivated to improve my oral presentations when I receive constructive feedback*) were excluded due to weak factor loading (<0.6). This indicates that these items have poor strength with the construct. Meanwhile, FBL13 (*I plan how I will use them to improve my future presentations*) and FBL15 (*I use feedback to enhance my current oral presentation*) were dropped due to substantial cross-loadings on multiple components which could potentially compromise the interpretability of the factor structure.

The EFA results presented in Table 3.33 further revealed a three-factor structure for feedback literacy, representing different dimensions of how students engage with, process and facilitate feedback in oral presentations. The three subconstructs were renamed to reflect their respective items, with items relabelled accordingly.

The first factor, feedback engagement, comprises ten items (FE1-FE10) and focuses on students' active involvement in feedback processes. In the context of this study, feedback engagement refers to how students interact with and respond to feedback provided by teachers or peers to improve performance.

The second factor, feedback resilience, encompasses six items (FR1-FR6) and captures students' ability to process feedback constructively, particularly when faced with negative or critical comments. In this study, feedback resilience is operationalised as students' ability to receive and process feedback on their oral presentations in a constructive and emotionally regulated manner.

The final factor is feedback facilitation which consists of six items (FF1-FF6). In this study, feedback facilitation is operationalised as students' ability to participate actively in the feedback process by offering constructive, specific, and improvement-focused feedback to their peers during oral presentation activities.

The EFA results confirm that feedback literacy is best represented as a three-factor construct, incorporating engagement with, resilience toward, and facilitation feedback in oral presentations. The strong factor loadings across the three factors indicate that the retained items provide a reliable and valid representation of students' feedback literacy. Therefore, the final 22 items are presented in Table 3.33.

Table 3.33
Final Items for Feedback Literacy Construct

Item No	Previous Item Label	Sub-Constructs	New Item Label	Statement	Component 1	Component 2	Component 3
1	FBL1	Feedback Engagement	FE1	I reflect on the quality of my oral presentations after receiving feedback.	.685		
2	FBL2		FE2	I use my reflection as a source of information to improve my oral presentations.	.748		
3	FBL3		FE3	I seek out examples of good work to improve my oral presentation.	.760		
4	FBL4		FE4	I listen or read thoughtfully when other people provide me with input about my oral presentations.	.645		
5	FBL5		FE5	I consider comments I have received on similar tasks when I am working on my oral presentations.	.738		
6	FBL6		FE6	I ask for comments about specific aspects of my oral presentations.	.623		
7	FBL7		FE7	I carefully consider comments about my presentations before deciding if I will use them or not.	.739		
8	FBL8		FE8	I determine which feedback that I will use when receiving conflicting feedback about my oral presentations.	.771		
9	FBL10		FE9	I consider how comments relate to rubrics of the oral presentations.	.753		
10	FBL12		FE10	I use comments on my presentation to refine my understanding of what a good quality presentation looks like.	.739		

Item No	Previous Item Label	Sub-Constructs	New Item Label	Statement	Component 1	Component 2	Component 3
11	FBL11	Feedback Resilience	FR1	I check whether my presentation is better after I have acted on the feedback.		.620	
12	FBL14		FR2	I keep comments on previous presentations to use again the in future.		.610	
13	FBL22		FR3	I am open to reasonable criticism about my oral presentations.		.639	
14	FBL23		FR4	I deal well with any negative emotional responses I have to feedback information.		.651	
15	FBL24		FR5	I find ways to use feedback constructively even if it is negative.		.629	
16	FBL26		FR6	I fully utilise the feedback received even if it is negative.		.789	
17	FBL16	Feedback Facilitation	FF1	I offer constructive feedback when commenting on others' oral presentations.			.767
18	FBL17		FF2	I comment on other people's oral presentations when I am invited to.			.802
19	FBL18		FF3	I take the initiative to refer to rubrics when commenting on other people's oral presentations.			.709
20	FBL19		FF4	I offer to provide feedback to my peers.			.690
21	FBL20		FF5	I try to be very clear when providing feedback to others.			.651
22	FBL21		FF6	I cross-check my feedback about others' oral presentations.			.676

3.10.4.3 Grit

An exploratory factor analysis (EFA) was conducted to identify the factor structure of grit. Table 3.35 shows that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.929, which exceeds the recommended threshold of 0.6 (Awang, 2015; Hair et al., 2010; Limone et al., 2021; Williams et al., 2010). This confirms that the dataset was suitable for factor analysis. Additionally, Table 3.34 demonstrates that Bartlett's Test of Sphericity was significant (X^2=1440.743, df=78, p<0.001) (Awang, 2015; Gie Yong & Pearce, 2013; Williams et al., 2010), which indicates the presence of sufficient correlations among items to justify factor extraction.

Table 3.34
KMO and Bartlett's Test for Grit

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.929
Bartlett's Test of Sphericity	Approx. Chi-Square	1440.743
	df	78
	Sig.	<.001

Table 3.35 shows that the initial factor extraction revealed two components with eigenvalues greater than 1. The first factor accounted for 40.464% and the second for 31.773% of the variance, collectively explaining 72.237% of the total variance which surpasses the threshold of 60% (Sigudla & Maritz, 2023; Williams et al., 2010).

Table 3.35
Total Variance Explained for Grit

Total Variance Explained

	Initial Eigenvalues			**Extraction Sums of Squared Loadings**			**Rotation Sum of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.384	64.489	64.489	8.384	64.489	64.489	5.260	40.464	40.464
2	1.007	7.748	72.237	1.007	7.748	72.237	4.131	31.773	**72.237**

The scree plot (Figure 3.10) further validated a two-factor solution as the elbow point flatlined at the second component mark. This structure indicates that grit comprises two dimensions rather than a single unidimensional construct.

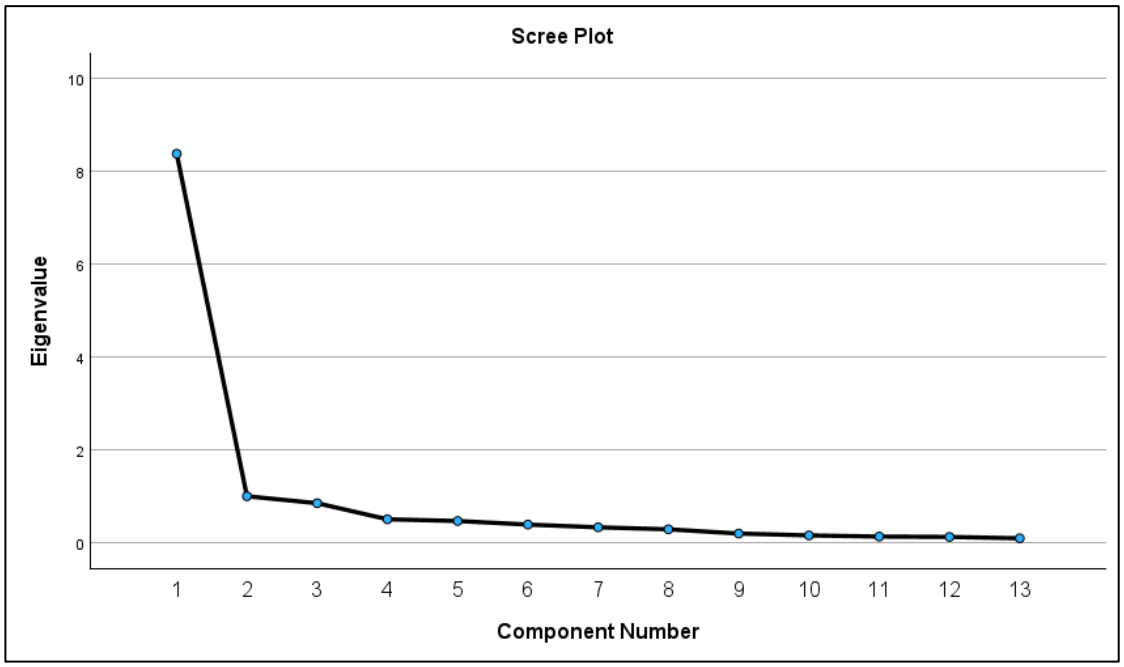


Figure 3.10 Scree Plot for Grit

The rotated component matrix results presented in Table 3.36 demonstrated that 12 items were retained across three factors which ranged from 0.657 to 0.868. These 12 items surpassed the 0.6 benchmark for item retention (Awang, 2015; Hair et al., 2010; Williams et al., 2010).

Table 3.36
Rotated Component Matrix for Grit

Rotated Component Matrix			
Item Label	**Statement**	**Component**	
		Component 1	**Component 2**
GRT1	I work hard to learn English to improve my oral presentations.		.868
GRT2	I put time and effort into improving my English language weaknesses to improve my oral presentations.		.811
GRT3	I am always interested to learn about oral presentations.		.666
GRT4	I always ensure that I maintain my focus when learning about oral presentations.		.732
GRT5	I have many ideas that I will always add into my oral presentation.	.760	
GRT6	I often set a goal for my oral presentations.		.699
GRT7	I always ensure that I do not get distracted from my oral presentations.	.657	
GRT8	I am dedicated to completing all tasks for my oral presentations.	**Factor loading <0.6**	
GRT9	I take the initiative to construct new ideas for my oral presentations.	.809	
GRT10	I am committed to doing my best in my oral presentations.	.804	
GRT11	I am dedicated to completing all tasks for my oral presentations.	.804	
GRT12	I put in significant effort for my oral presentations.	.813	
GRT13	I will not allow anything to stop my learning progress of oral presentations.	.740	

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization
a. Rotation converged in 3 iterations

As shown in Table 3.36, item GRT8 (*I am dedicated to completing all tasks for my oral presentations*) was dropped due to weak factor loading (<0.6). Also, the post-EFA factor structure revealed two distinct subconstructs of grit that were renamed to reflect their respective items. The items were also relabelled to mirror the new names of the two subconstructs.

The first factor, perseverance of effort, consists of five items (POE1-POE5) and captures students' sustained effort and commitment to develop their oral presentation

competence. In this study, perseverance of effort is operationalised as students' ability to maintain ongoing and deliberate effort to improve their oral presentation competence over time, regardless of difficulties encountered.

The second factor, mastery through actions, comprises seven items (MTA1-MTA7). This factor represents students' proactive learning behaviours and commitment to excel in oral presentations. In this study, mastery of actions is operationalised as students' willingness to undertake difficult oral presentation tasks and to persist in practising and improving their competence despite challenges.

The final EFA results confirm that grit is conceptualised as a two-factor construct, emphasising both perseverance and active mastery of oral presentations. The newly named subconstructs and items are presented in Table 3.37.

Table 3.37
Final Items for Grit Construct

Item No	Previous Item Label	Sub-Constructs	New Item Label	Statement	Component 1	Component 2
1	GRT1	Perseverance of Effort	POE1	I consistently work on my English to improve my oral presentations.		.868
2	GRT2		POE2	I dedicate time to improving my English for my oral presentations.		.811
3	GRT3		POE3	I consistently seek to learn more about oral presentations.		.666
4	GRT4		POE4	I consistently stay focused when learning about oral presentations.		.732
5	GRT6		POE5	I always set goals for my oral presentations.		.699
6	GRT5	Mastery Through Actions	MTA1	I actively seek new ideas for my oral presentations.	.760	
7	GRT7		MTA2	I make sure to stay focused during my oral presentations.	.657	
8	GRT9		MTA3	I proactively develop new ideas for my oral presentations.	.809	
9	GRT10		MTA4	I am committed to doing my best in my oral presentations.	.804	
10	GRT11		MTA5	I am dedicated to completing all tasks for my oral presentations.	.804	
11	GRT12		MTA6	I put in significant effort for my oral presentations.	.813	
12	GRT13		MTA7	I am determined to maintain my learning progress in oral	.740	

3.10.4.4 Intrinsic Motivation

An exploratory factor analysis (EFA) was conducted to examine the latent structure of intrinsic motivation. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.897 (Table 3.38), which exceeds the recommended threshold of 0.6 (Awang, 2015; Hair et al., 2010; Limone et al., 2021; Williams et al., 2010). This confirms that the dataset was suitable for factor analysis. Additionally, Table 3.39 demonstrates that Bartlett's Test of Sphericity was significant (X^2=2173.452, df=136, p<0.001) (Awang, 2015; Gie Yong & Pearce, 2013; Williams et al., 2010), which indicates the presence of sufficient correlations among items to justify factor extraction.

Table 3.38
KMO and Bartlett's Test for Intrinsic Motivation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	2173.452
	df	136
	Sig.	<.001

The initial factor extraction (Table 3.39) revealed three components with eigenvalues greater than 1. The first factor accounted for 32.987%, the second factor explains 29.052% while the third factor explains 14.229% of the variance, collectively explaining 76.268% of the total variance which surpasses the threshold of 60% (Sigudla & Maritz, 2023; Williams et al., 2010).

Table 3.39
Total Variance Explained for Intrinsic Motivation

Total Variance Explained

Initial Eigenvalues			**Extraction Sums of Squared Loadings**			**Rotation Sum of Squared Loadings**		
Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	9.557	56.216	56.216	9.557	56.216	56.216	5.608	32.987	32.987
2	2.364	13.908	70.124	2.364	13.908	70.124	4.939	29.052	62.039
3	1.044	6.144	76.268	1.044	6.144	76.268	2.419	14.229	**76.268**

The scree plot (Figure 3.11) further validated a three-factor solution as the elbow point flatlined at the fourth component mark. This structure indicates that intrinsic motivation comprises multiple dimensions rather than a single unidimensional construct.

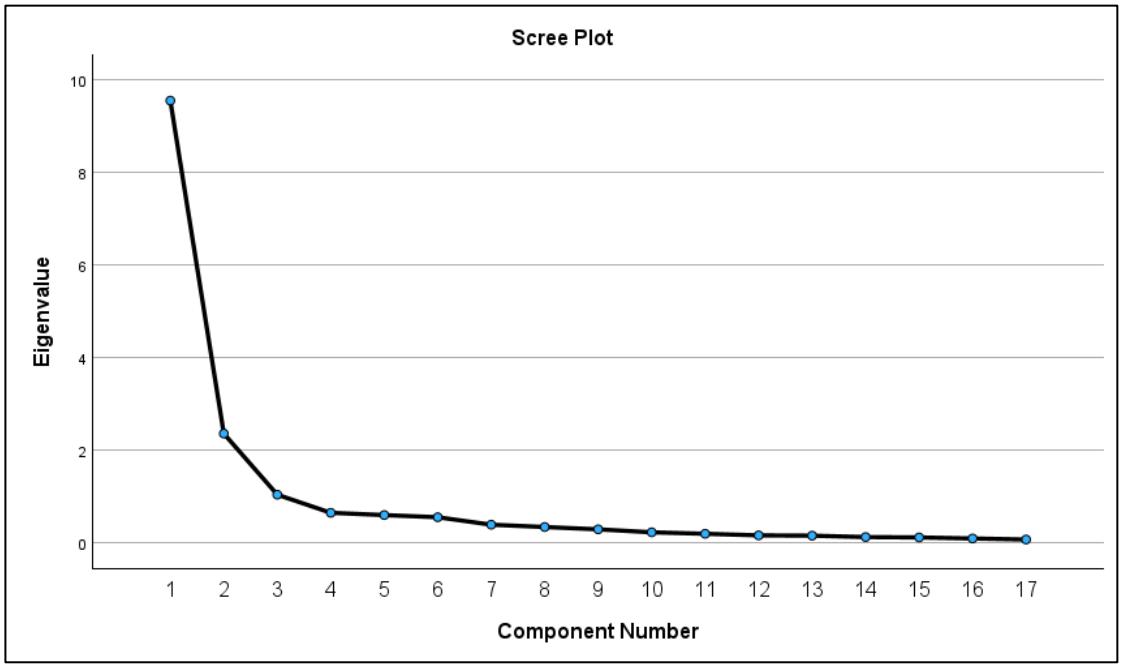


Figure 3.11 Scree Plot for Intrinsic Motivation

The rotated component matrix (Table 3.40) revealed that 17 items loaded onto three components. Each represents distinct aspects of intrinsic motivation in oral presentations. The factor loadings ranged from 0.605 to 0.905 which exceeded the 0.6 threshold for item retention (Awang, 2015; Hair et al., 2010; Williams et al., 2010).

Table 3.40
Rotated Component Matrix for Intrinsic Motivation

Rotated Component Matrix				
Item		**Component**		
		Component 1	**Component 2**	**Component 3**
IMT1	I find satisfaction in preparing for my oral presentations.	.691		
IMT2	I feel a sense of enjoyment when I am presenting.	.800		
IMT3	I find presenting to an audience is a rewarding experience.	.805		
IMT4	I genuinely enjoy giving oral presentations.	.811		
IMT5	I find it fulfilling to share my ideas through oral presentations.	.875		
IMT6	I feel increasingly competent in oral presentations with each practice session		.643	
IMT7	I feel a sense of satisfaction with my performance in oral presentations.	.763		
IMT8	I put a lot of effort in my oral presentations.			.842
IMT9	I tried very hard for my oral presentations.		.623	
IMT10	I find it important to do well in oral presentations.		.757	
IMT11	I conduct my oral presentations with self-assurance.			.773
IMT12	I feel a sense of calm when delivering my oral presentations.	.742		
IMT13	I feel excited to share my oral presentation content with the audience.	.605		
IMT14	I recognize the value that oral presentations offer me.		.756	
IMT15	I believe that delivering oral presentations is valuable for my future career.		.905	
IMT16	I believe delivering oral presentations is crucial for enhancing my communication skills.		.890	
IMT17	I believe delivering oral presentations is essential for building my confidence.		.824	

Although the initial factor structure suggested that intrinsic motivation was best represented by three components, a closer examination revealed that third component contained only two items which violates the general rule that a minimum of four items is required to define a valid factor (Diamantopoulos et al., 2012; Raubenheimer, 2004). Therefore, parallel analysis was conducted to confirm the number of factors that should be retained.

A parallel analysis is a Monte Carlo simulation technique that determines the number of factors to be retained in principal component analysis by comparing the actual eigenvalues from principal component analysis with criterion values generated from simulated random data (Ledesma & Valero-Mora, 2007). Table 3.41 shows that the actual eigenvalue (1.044) of the third component was lower than the Monte Carlo criterion value (1.425).

Therefore, the items loaded in the third component were dropped from the final factor solution (see Table 3.42) (Franklin et al., 1995; Holubova, 2023). This result confirmed that intrinsic motivation is best represented by a two-factor structure, rather than the initially extracted three factors.

Table 3.41
Parallel Analysis for Intrinsic Motivation

Component Number	Actual Eigenvalue from PCA	Criterion Value from Parallel Analysis	Decision
1	9.557	1.6880	Accept
2	2.364	1.5285	Accept
3	1.044	1.4250	Reject

Table 3.42
Dropped Items from Intrinsic Motivation Construct

No.	Item Label	Item	Reason for Item Deletion
1	IMT8	I put a lot of effort in my oral presentations.	PCA eigenvalue is lower than Monte Carlo criterion value
2	IMT11	I conduct my oral presentations with self-assurance.	

After the deletion of the third component, intrinsic motivation was redefined as a two-factor construct. The first factor is satisfaction-driven motivation and consists of eight items (SDM1-SDM8). This study operationalises this factor as the extent to which students experience enjoyment and a sense of accomplishment when participating in oral presentations.

The second factor comprises seven items (VRM1-VRM7) and represents students' recognition of the importance of oral presentations for personal and professional growth. In this study, value-recognition motivation is operationalised as the extent to which students perceive oral presentations as important for their academic achievement and future professional development.

The final EFA solution confirms that intrinsic motivation is best conceptualised as a two-factor construct with a total of 15 items, as presented in Table 3.43. The study then proceeded to assess the factor structure of the final construct, oral presentation competence.

Table 3.43
Final Items for Intrinsic Motivation Construct

Item No	Previous Item Label	Sub-Constructs	New Item Label	Statement	Component 1	Component 2
1	IMT1	Satisfaction-Driven Motivation	SDM1	I find satisfaction in preparing for my oral presentations.	.691	
2	IMT2		SDM2	I feel a sense of enjoyment when I am presenting.	.800	
3	IMT3		SDM3	I find presenting to an audience is a rewarding experience.	.805	
4	IMT4		SDM4	I genuinely enjoy giving oral presentations.	.811	
5	IMT5		SDM5	I find it fulfilling to share my ideas through oral presentations.	.875	
6	IMT7		SDM6	I feel a sense of satisfaction with my performance in oral presentations.	.763	
7	IMT12		SDM7	I feel a sense of calm when delivering my oral presentations.	.742	
8	IMT13		SDM8	I feel excited to share my oral presentation content with the audience.	.605	
9	IMT6	Value Recognition Motivation	VRM1	I feel increasingly competent in oral presentations with each practice session.		.643
10	IMT9		VRM2	I am committed to putting in my best effort for my oral presentations.		.623
11	IMT10		VRM3	I find it important to do well in oral presentations.		.757
12	IMT14		VRM4	I recognize the value that oral presentations offer me.		.756
13	IMT15		VRM5	I believe that delivering oral presentations is valuable for my future career.		.905
14	IMT16		VRM6	I believe delivering oral presentations is crucial for enhancing my communication skills.		.890
15	IMT17		VRM7	I believe delivering oral presentations is essential for building my confidence.		.824

3.10.4.5 Oral Presentation Competence

An exploratory factor analysis (EFA) was conducted to examine the latent structure of oral presentation competence. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.914 (Table 3.44) which surpasses the recommended threshold of 0.6 (Awang, 2015; Hair et al., 2010; Limone et al., 2021; Williams et al., 2010). This confirms that the dataset was suitable for factor analysis. Table 4.32 also demonstrates that Bartlett's Test of Sphericity was significant (X^2=3345.797, df=325, p<0.001) (Awang, 2015; Gie Yong & Pearce, 2013; Williams et al., 2010), assuring the presence of sufficient correlations among items to justify factor extraction.

Table 3.44
KMO and Bartlett's Test for Oral Presentation Competence

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	3345.797
	df	325
	Sig.	<.001

The initial factor extraction (Table 3.45) revealed three components with eigenvalues greater than 1. The results also show that the first factor accounted for 24.134%, the second for 22.686%, and the third for 22.530% of the variance, collectively explaining 69.349% of the total variance which surpasses the threshold of 60% (Sigudla & Maritz, 2023; Williams et al., 2010).

Table 3.45
Total Variance Explained for Oral Presentation Competence

Total Variance Explained

	Initial Eigenvalues			**Extraction Sums of Squared Loadings**			**Rotation Sum of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.957	53.680	53.680	13.957	53.680	53.680	6.275	24.134	24.134
2	2.880	11.075	64.755	2.880	11.075	64.755	5.898	22.686	46.820
3	1.194	4.594	69.349	1.194	4.594	69.349	5.858	22.530	**69.349**

The scree plot (Figure 3.12) further validated a three-factor solution as the elbow point flatlined at the fourth component mark. This structure indicates that oral presentation competence consists of three factors and is multi-factor construct.

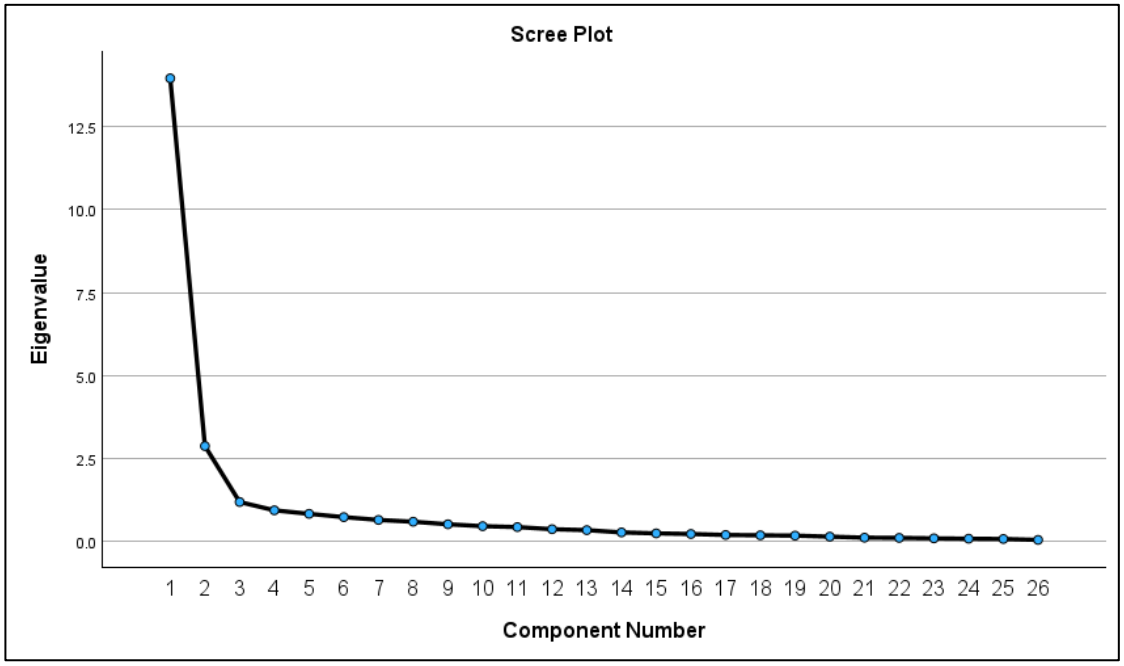


Figure 3.12 Scree Plot for Oral Presentation Competence

Upon examining the rotated component matrix (Table 3.46), 21 items were retained across three factors which ranged from 0.615 to 0.897. These 21 items surpassed the 0.6 benchmark for item retention (Awang, 2015; Hair et al., 2010; Williams et al., 2010).

Table 3.46
Rotated Component Matrix for Oral Presentation Competence

Rotated Component Matrix				
Item	**Statement**	**Component**		
		Component 1	**Component 2**	**Component 3**
OPC1	I always ensure that the content of my presentations matches with the assigned topic.		.897	
OPC2	I always ensure that the content of my presentations is clear.		.858	
OPC3	I always ensure that the content of my presentations is well-organised.		.890	
OPC4	I always ensure that my presentations contain accurate information.		.797	
OPC5	I always ensure that key points are highlighted in my oral presentations.		.747	
OPC6	I always ensure that my key points are supported by evidence.		.734	
OPC7	I maintain appropriate eye contact with the audience during my oral presentations.	.658		
OPC8	I minimise my reliance on slides during my oral presentations.	.740		
OPC9	I seldom refer to my notes during my oral presentations.	.872		
OPC10	I project my voice clearly during my oral presentations.			.624
OPC11	I always speak with enthusiasm during my oral presentations.			.682
OPC12	I demonstrate confidence during my oral presentations.	.693		
OPC13	I effectively use visual aids, graphics, and slides in my oral			.687

Item	Statement	Rotated Component Matrix		
		Component		
		Component 1	Component 2	Component 3
	presentations.			
OPC14	I can use technological tools in my oral presentations.		**Factor Loading <0.6**	
OPC15	I incorporate effective gestures in my oral presentations.	.668		
OPC16	I maintain good control of my physical movements during my oral presentations.			.625
OPC17	I maintain good control of my body positioning during my oral presentations.			.718
OPC18	I effectively use vocal stress to emphasize key points during my oral presentations.			.675
OPC19	I make the effort to reduce fillers (uhm, ahh, hmm) during my oral presentations.		**Factor Loading <0.6**	
OPC20	I adhere to the time limit during my oral presentations.		**Factor Loading <0.6**	
OPC21	I can follow the time given for my oral presentations.		**Factor Loading <0.6**	
OPC22	I dress in a manner that is appropriate for my oral presentations.			.785
OPC23	I always research topics that may appeal to the audience for my oral presentations.		**Factor Loading <0.6**	
OPC24	I always search for topics that might interest my audience for my oral presentations.			.615

Rotated Component Matrix				
Item	**Statement**	**Component**		
		Component 1	**Component 2**	**Component 3**
OPC25	I actively engage the audience during the Q&A session.	.691		
OPC26	I thoroughly prepare for my oral presentation in advance.		.659	

Based on the rotated component matrix results in Table 3.46, five items were removed due to low factor loadings (<0.6). The removed items and the reasons for their deletion are presented in Table 3.47. The removal of these items was necessary to enhance construct validity and ensure that the items provide a clear and reliable measure of oral presentation competence.

Table 3.47
Dropped Items for Oral Presentation Competence Construct

No.	Item Label	Item	Reason for Item Deletion
1	OPC14	I can use technological tools in my oral presentations.	Factor loading was below 0.6
2	OPC19	I make the effort to reduce fillers (uhm, ahh, hmm) during my oral presentations.	Factor loading was below 0.6
3	OPC20	I adhere to the time limit during my oral presentations.	Factor loading was below 0.6
4	OPC21	I can follow the time given for my oral presentations.	Factor loading was below 0.6
5	OPC23	I always research topics that may appeal to the audience for my oral presentations.	Factor loading was below 0.6

The rotated component matrix results revealed that the 21 retained items measuring oral presentation competence is best conceptualised as a three-factor construct that were renamed as (1) delivery, (2) content mastery, and (3) audience engagement.

The first factor, delivery, consists of six items (DEL1-DEL6) and capture the physical and verbal aspects of effective oral presentation delivery. In this study, delivery refers to the speaker's ability to express ideas effectively using verbal strategies and non-verbal behaviours during oral presentations.

The second factor is content mastery which includes seven items (CMT1-CMT7). In this study, content mastery is operationalised as the ability to develop, organise, and deliver well-structured and clear presentation content that reflects a sound understanding of the topic.

The third factor, audience engagement, consists of eight items (AUD1-AUD8). This study operationalises audience engagement as the students' ability to capture and sustain audience interest throughout an oral presentation.

The final EFA solution confirms that oral presentation competence is best represented as a three-factor construct and consists of 21 items (Table 3.48). Hence, the results of this section have established a robust factor structure for oral presentation competence. Therefore, this study will proceed to examine the reliability analysis for all constructs.

Table 3.48
Final Items for Oral Presentation Competence Construct

Item No	Previous Item Label	Sub-Constructs	New Item Label	Statement	Component 1	Component 2	Component 3
1	OPC7	Delivery	DEL1	I maintain appropriate eye contact with the audience during my oral presentations.	.658		
2	OPC8		DEL2	I minimise my reliance on slides during my oral presentations.	.740		
3	OPC9		DEL3	I seldom refer to my notes during my oral presentations.	.872		
4	OPC12		DEL4	I demonstrate confidence during my oral presentations.	.693		
5	OPC15		DEL5	I incorporate effective gestures in my oral presentations.	.668		
6	OPC25		DEL6	I actively engage the audience during the Q&A session.	.691		
7	OPC1	Content Mastery	CMT1	I always ensure that the content of my presentations matches with the assigned topic.		.897	
8	OPC2		CMT2	I always ensure that the content of my presentations is clear.		.858	
9	OPC3		CMT3	I always ensure that the content of my presentations is well-organised.		.890	
10	OPC4		CMT4	I always ensure that my presentations contain accurate information.		.797	
11	OPC5		CMT5	I always ensure that key points are highlighted in my oral presentations.		.747	
12	OPC6		CMT6	I always ensure that my key points are supported by evidence.		.734	
13	OPC26		CMT7	I thoroughly prepare for my oral presentation in advance.		.659	

Item No	Previous Item Label	Sub-Constructs	New Item Label	Statement	Component 1	Component 2	Component 3
14	OPC10	Audience Engagement	AUD1	I project my voice clearly during my oral presentations.			.624
15	OPC11		AUD2	I always speak with enthusiasm during my oral presentations.			.682
16	OPC13		AUD3	I effectively use visual aids, graphics, and slides in my oral presentations.			.687
17	OPC16		AUD4	I maintain good control of my physical movements during my oral presentations.			.625
18	OPC17		AUD5	I maintain good control of my body positioning during my oral presentations.			.718
19	OPC18		AUD6	I effectively use vocal stress to emphasize key points during my oral presentations.			.675
20	OPC22		AUD7	I dress in a manner that is appropriate for my oral presentations.			.785
21	OPC24		AUD8	I always search for topics that might interest my audience for my oral presentations.			.615

3.10.5 Reliability Analysis of Pilot Data

The reliability of a measurement instrument is a critical aspect for ensuring the consistency of the scores derived from it (Cronbach, 1947; Liu et al., 2024). A highly reliable instrument produces stable and repeatable results across multiple trials, indicating that the measured construct is internally consistent (Hopkins, 2000; McMillan, 2014). Higher internal reliability is essential in establishing the overall quality of a research instrument (Kraemer, 2008) as it impacts the interpretability of the research findings.

In this study, the reliability of the constructs and subconstructs was assessed using Cronbach's alpha, a widely recognised reliability coefficient introduced by Cronbach (1951). Cronbach's alpha determines the interrelatedness of items within a construct and assesses whether they collectively measure the same underlying concept (Christmann & Van Aelst, 2006; Tavakol & Dennick, 2011).

DeVellis (2016) and George and Mallery (2016) provide a widely accepted framework for interpreting Cronbach's alpha values, which serves as benchmark for evaluating the reliability of constructs. According to their guidelines, alpha values above 0.90 are considered excellent as they indicate strong reliability. Values between 0.80 and 0.90 are classified as good, reflecting high reliability. An alpha between 0.70 and 0.80 is deemed acceptable, while values from 0.65 to 0.70 are regarded as minimally acceptable. In contrast, alpha values ranging from 0.60 to 0.65 are considered undesirable or questionable, and those below 0.60 are categorised as poor or unacceptable. Additionally, Nunnally (1978) asserts that a minimum threshold of 0.70 is required for an instrument to be considered reliable, with values below this level suggesting inadequate internal consistency.

Reliability analysis was performed on all constructs and respective sub-constructs before and after exploratory factor analysis. The pre-EFA reliability results indicated that all constructs exhibited high to excellent internal consistency as Cronbach's alpha values exceeding 0.89. Following EFA, items with low factor loadings or cross-loadings were removed to refine the instrument from 88 to 76 items. Despite the reduction in items, post-EFA reliability remained consistently high. A comparison of the reliability coefficients before and after EFA is presented in Table 3.49.

Table 3.49
Reliability Analysis Results of Pilot Data

No.	Construct	Before EFA		Sub-Constructs	After EFA	
		Number of Items	Cronbach's alpha		Number of Items	Cronbach's alpha
1	Perceived Autonomy Support	6	0.898	Perceived Autonomy Support	6	0.898
		6	**0.898**		**6**	**0.898**
2	Feedback Literacy	26	0.971	Feedback Engagement	10	0.948
				Feedback Resilience	6	0.920
				Feedback Facilitation	6	0.944
		26	**0.971**		**22**	**0.970**
3	Grit	13	0.951	Mastery Through Actions	7	0.939
				Perseverance of Effort	5	0.896
		13	**0.951**		**12**	**0.955**
4	Intrinsic Motivation	17	0.947	Satisfaction-Driven Motivation	8	0.944
				Value-Recognition Motivation	7	0.931
		17	**0.947**		**15**	**0.956**
5	Oral Presentation Competence	26	0.963	Delivery	6	0.902
				Content Mastery	7	0.937
				Audience Engagement	8	0.942

	26	**0.963**		**21**	**0.969**
Final Total of Items/Average	**88**	**0.986**	**Final Total of Items /Average**	**76**	**0.985**

For perceived autonomy support, the pre-EFA and post-EFA Cronbach's alpha remained unchanged at 0.898 as no items were removed.

The second construct, feedback literacy, initially comprised 26 items with α=0.974. The construct was segregated into three distinct sub-constructs post EFA: (1) feedback engagement (10 items, α=0.948), (2) feedback resilience (6 items, α=0.920), and feedback facilitation (6 items, α=0.944). The overall post-EFA reliability remained excellent (α=0.970) despite the reduction to 22 items. This indicates that the refined construct retained its strong internal consistency.

Similarly, grit was initially measured using 13 items (α=0.951) and was refined into two subconstructs after EFA: (1) mastery through actions (7 items, α=0.939) and (2) perseverance of effort (5 items, α=0.896). The total reliability of the construct increased slightly to 0.955 post-EFA. This demonstrates that the item reduction process strengthened the internal consistency of the construct.

Intrinsic motivation, which originally consisted of 17 items (α=0.947), was reorganised into two subconstructs post-EFA. The first subconstruct is satisfaction-driven motivation (8 items) and obtained an alpha value of 0.944 while the second subconstruct, value-recognition motivation (7 items) attained an alpha value of 0.9231. After refinement, the total reliability increased to 0.956 which signifies that the revised construct structure was more internally consistent.

Lastly, oral presentation competence underwent significant refinement as the construct reduced from 26 items (α=0.963) to 21 items (α=0.969) with three sub-constructs emerging post-EFA. The first subconstruct is delivery (6 items, α=0.902) while the second subconstruct is content mastery (7 items, α=0.969). The final subconstruct is audience engagement (8 items, α=0.942). The increase in reliability post-EFA (α=0.969) confirms that the construct is reliable in measuring oral presentation competence despite item reduction.

The final analysis for the overall 76-item instrument yielded a Cronbach's alpha value of 0.985, compared to the pre-EFA reliability of 0.986 for the original 88-item instrument. This marginal difference demonstrates that item removal did not compromise the reliability of the instrument, and the refined scale maintain excellent internal consistency. The consistently high Cronbach's alpha values across constructs also indicate that the instrument is reliable for measuring the intended variables in the present study.

3.11 Final Research Instrument

This section discusses the final research instrument (refer to Appendix 8), refined through adaptation, expert review, pre-testing, and exploratory factor analysis. The instrument, referred to as Oral Presentation Competence Inventory (OPCI), consists of six sections beginning with a cover page that outlines the study's purpose, seeks respondents' consent, and ensures the confidentiality of collected data. Additionally, the researcher's credentials and contact details are provided to facilitate transparency and allow respondents to seek clarification or report any technical issues when completing the online survey.

Section A gathers respondents' demographic information, comprising four variables: gender, programme cluster, semester, and course enrolment. A new variable, semester, was added to the final version to account for academic progressions, as earlier studies demonstrate that first-year students exhibit lower competence and higher self-regulation (Herzog, 2005; Shcheglova et al., 2020; Small et al., 2017). To maintain data integrity, respondents selecting "None of the above" were automatically redirected to the end of the survey to prevent non-relevant data from being included in the final dataset.

The main body of the instrument, Sections B, consists of 76 items designed to measure key constructs related to students' oral presentation experiences. All items are rated on a 10-point interval scale ranging from 1 (*strongly disagree*) to 10 (*strongly agree*). Section B comprises six items measuring perceived autonomy which captures students' perceptions of the extent to which their lecturer fosters autonomy in oral presentation activities. Section C consists of 22 items assessing feedback literacy, focusing on students' ability to interpret, utilise, and engage with feedback effectively in the context of oral presentations. Section D contains 15 items examining intrinsic motivation which evaluates the extent to which students are internally driven to participate in oral presentations without external pressure. Finally, Section E consists of 21 items measuring oral presentation competence and captures students' self-reported proficiency in delivering oral presentations including aspects such as clarity, organisation, confidence, and audience engagement.

3.12 Fieldwork Data Collection and Cleaning Procedures

This section presents the procedures undertaken for the collection, screening, and cleaning of the fieldwork data. It first describes the data collection process, including the administration of the survey instruments and the steps taken to ensure adequate response rates across the identified sampling frame. Subsequently, the section details the data screening and cleaning procedures conducted to prepare the dataset for subsequent analyses. These procedures included checks for missing values, identification of outliers, and assessment of data normality to prepare the data for further statistical analysis.

3.12.1 Data Collection Procedures for Fieldwork Data

The instrument was administered to collect field data for confirmatory factor analysis (CFA) and structural equation modelling (SEM). The target population comprised 2,586 undergraduate students enrolled in four oral-presentation focused language proficiency courses: English for Oral Presentations (ELC590), English for Informative Speeches (LCC400), English for Oral Reporting (LCC402), and English for Persuasion (LCC600). Only students enrolled in the selected courses during the data collection period were eligible to participate.

A two-stage probability sampling approach was employed. In the first stage, stratified random sampling was used and followed by simple random sampling in the second stage. A total of 976 students were randomly chosen as potential respondents to answer the survey.

This study received ethical clearance from the University Research Ethics Committee (Ref. No: REC/03/2022 (PG/MR/40) (Appendix 3) prior to data collection. Informed consent was obtained through a digital form embedded at the beginning of the questionnaire, and respondents were assured that their responses would remain anonymous and confidential.

Data collection was conducted over a twelve-week period and an online questionnaire hosted on Google Forms was used. Invitations to answer the survey were distributed through official university email addresses. Each email included a personalised cover letter explaining the purpose of the study, outlining ethical safeguards, and providing a direct link to the survey. Participation was entirely

voluntary, and no incentives were provided. Periodic reminder emails were sent to improve the response rate.

A total of 408 responses were received, resulting in an initial response rate of 41.8%. During the initial data screening, seven responses from students who were not enrolled in the four targeted courses and 16 patterned responses were removed, leaving 385 screened cases for further analysis. The dataset was subsequently examined for multivariate outliers using the Mahalanobis Distance procedure as elaborated in Section 3.12.2.2. Two cases were identified as multivariate outliers and excluded, resulting in a final analytical sample of 383 valid responses (N=383). This represents a valid response rate of 39.2%, which is considered acceptable for voluntary online surveys (Bujang et al., 2024; Shiyab et al., 2023) and exceeds the minimum sample size required for CFA and SEM, thereby ensuring adequate statistical power for the subsequent analyses.

3.12.2 Data Screening and Cleaning Procedures of Fieldwork Data

The first stage involved data screening and cleaning which included the identification and treatment of missing values, outlier detection, and the assessment of normality to ensure that the dataset met the assumptions required for multivariate analysis.

3.12.2.1 Missing Value Analysis

Missing values are defined as the absence of responses to the survey items in the questionnaire (Mirzaei et al., 2022). Addressing missing values is crucial for ensuring data integrity as incomplete datasets can lead to biased parameter estimates (Mavridis & White, 2020; Vach & Blettner, 1991) and reduced statistical power (Acock, 2005; Kwak & Kim, 2017).

Missing data occurs when respondents either deliberately or unintendedly skip certain items in a questionnaire which can affect the completeness and validity of the dataset (Kotronoulas et al., 2023). According to Acuña and Rodriguez (2004), missing data can be interpreted along a continuum: if less than 1%, it is typically negligible, below 5% is considered manageable whereas missingness exceeding 15% necessitates the use of advanced statistical remedies. Given these considerations, a systematic process was undertaken to detect and handle missing values in the data.

To ensure data integrity, a missing value analysis was performed using descriptive statistics in IBM SPSS version 29.0. The response range for all items in the questionnaire was 1 (strongly disagree) to 10 (strongly agree). A review of the dataset confirmed that all recorded responses fell within this predefined range, indicating that the data were entered accurately without input errors. The total number of responses remained consistent across all items, with 385 valid cases recorded for each variable. This confirmed that the screened dataset of 385 cases contained no missing values. The dataset was therefore retained for the subsequent assessment of univariate and multivariate outliers.

3.12.2.2 Assessment of Outliers

Outliers are observations that deviate significantly from other data points (Epstein, 2023), making them inconsistent with the overall dataset patterns (Leys et al., 2019). Identifying and managing outliers are crucial in quantitative research as their presence can distort statistical analyses and contribute to misleading inferences (Mowbray et al., 2019; Yuan & Bentler, 2001). Both univariate and multivariate outliers were subsequently assessed using the 385 screened cases retained after the missing value analysis.

Univariate outliers refer to cases with extreme values on a single variable (Mowbray et al., 2019). In this study, boxplots were employed to detect such cases (Smiti, 2020; Thanwiset & Srisodaphol, 2023), where open circles indicated values exceeding 1.5 times the interquartile range (IQR) from the central distribution (Dash et al., 2023; Mramba et al., 2024). This study retained all univariate outliers that were identified in all constructs following Osborne and Overbay (2004)'s argument that they should be retained since univariate outliers are legitimate outliers that often reflect natural variability in the population rather than measurement error. Retaining them preserves data representativeness and avoids the unnecessary exclusion of meaningful variability (Santacroce, 2017).

Different from univariate outliers, multivariate outliers are cases located at an unusually large distance from the centroid of all variables in combination (Bhattacharya et al., 2023). They can also be identified based on their values which are beyond three times the IQR and represented by asterisks. The Mahalanobis Distance (D^2) measure

was employed to identify and remove these outliers, as recommended by Hair et al. (2010) and Zijlstra et al. (2011).

The Mahalanobis Distance values were computed for all 385 cases in IBM SPSS 29.0. These values were compared against the critical Chi-square threshold as recommended by Tabachnick and Fidell (2007) and Wang et al. (2014). The corresponding degree of freedom (df) was set to 76, with a significance level of $p<0.001$ which yielded a critical X^2 value of 119.85. Cases exceeding this threshold of 119.85 were deemed multivariate outliers and removed to prevent undue influence on subsequent statistical analyses.

The results identified two cases (Case 95 and Case 276) with Mahalanobis Distance values exceeding the critical threshold of 119.85 which indicated that these responses exhibited extreme multivariate deviations. Case 95 attained an MD value of 126.36 while Case 276 attained 126.45. Thus, they were excluded from the dataset as they could potentially skew the analysis. Following the removal of the two multivariate outliers, the comprised 383 valid cases (N = 383) for normality checking.

3.12.2.3 Normality Test

Following the removal of the two multivariate outliers, the final analytical dataset (N=383) was examined for normality. Violations of normality can compromise the validity of parametric statistical analysis (Jiang et al., 2022). Accordingly, the normality of the data was evaluated using skewness and kurtosis values.

Blanca et al. (2013) suggest that acceptable skewness values typically range between -2.49 and 2.33, while acceptable kurtosis values range between -1.92 and 7.41. Extending this, Awang (2015) determined that a dataset can be considered normally distributed when skewness falls within an absolute range of ±1.0. For the 76 survey items under analysis, skewness values ranged from -0.910 to -0.452, while kurtosis ranged from -0.470 to 1.482. As all observed skewness values fall within the recommended thresholds, the dataset satisfied the assumption of univariate normality. Therefore, the study advanced to descriptive analysis of the demographic variables.

3.13 Demographic Profile of Respondents

This section presents the demographic profile of the 383 respondents in this study, focusing on gender, academic programme, semester of study, and course enrolment. The results, presented in Table 3.50, provide an overview of the distribution of respondents across these categories.

Table 3.50
Demographic Profile of the Respondents

Profile	Frequency (N=383)	Percentage (%)	Cumulative Percentage (%)
Gender			
Male	134	35.0	35.0
Female	249	65.0	100.0
Programme			
Science and Technology	180	47.0	47.0
Social Sciences and Humanities	134	35.0	82.0
Business and Management	69	18.0	100.0
Semester			
Semester 1	109	28.5	28.5
Semester 2	48	12.5	41.0
Semester 3	167	43.6	84.6
Semester 4	28	7.3	91.9
Semester 5	22	5.7	97.7
Semester 6	6	1.5	99.2
Semester 7	0	0.0	99.2
Semester 8	1	0.3	99.5
Semester 9	0	0.0	99.5
Semester 10	2	0.5	100.0
Course			
English for Oral Presentation (ELC590)	81	21.1	21.1
English for Informative Speech (LCC400)	125	32.9	54.0
English for Oral Reporting (LCC402)	150	39.2	93.2
English for Persuasion (LCC600)	26	6.8	100.0

As shown in Table 3.50, the gender distribution of the respondents indicates that 134 respondents (35.0%) were male and 249 respondents (65.0%) were female, totalling 383 respondents (100.0%) with a higher proportion of female respondents represented in the dataset.

In terms of academic programme, the respondents were drawn from three fields of study: science and technology with 180 respondents (47.0%), social sciences and humanities with 134 respondents (35.0%), and business and management with 69 respondents (18.0%). Collectively, these groups constitute the full sample of 383 respondents (100.0%).

A further breakdown by semester of study shows that most respondents were in Semester 3 (43.6%), followed by Semester 1 (28.5%), and Semester 2 (12.5%). Smaller proportions of respondents were from Semester 4 (7.3%), Semester 5 (5.7%), and Semester 6 (1.5%). Only three respondents were in the later stages of study; one student (0.3%) was from Semester 8, while 2 students (0.5%) were from Semester 10. No respondents were recorded in Semesters 7 and 9.

Regarding course enrolment, the largest group was enrolled in English for Oral Reporting (LCC402) (39.2%), followed by English for Informative Speech (LCC400) (32.9%). Meanwhile, English for Oral Presentations (ELC590) accounted for 81 students (21.1%), and English for Persuasion (LCC600) had the smallest representation, with only 26 students (6.8%).

Overall, the demographic profile of the respondents demonstrates a higher representation of female students, predominant enrolment in the science and technology programme, and a concentration of students in early semesters and in LCC400 and LCC402 courses. These characteristics establish a comprehensive demographic context for the study.

3.14 Fieldwork Data Analysis Procedures

This section presents the analysis of the fieldwork data, beginning with descriptive analysis to provide an overview of the respondents' demographic characteristics and the general distribution of the data. The section proceeds to the application of structural equation modeling (SEM), which is employed to examine both the measurement model and the structural model. The measurement model testing establishes the reliability and validity of the constructs, while the structural model

testing evaluates the hypothesised relationships among the study variables. Together, these analyses provide a comprehensive evaluation of the proposed research framework.

3.14.1 Descriptive Analysis

Descriptive statistics are used to organise, simplify, and present quantitative data in a meaningful way to detect patterns, identify anomalies, and understand the distribution of variables (Cooksey, 2020; Turner & Houle, 2019). This type of analysis is useful for understanding participants' demographic characteristics and their overall responses to the measured constructs (Guetterman, 2019).

In this study, descriptive analysis was conducted to summarise and interpret the basic characteristics of the dataset. Two levels of descriptive analysis were conducted in this study. First, four demographic variables (gender, programme cluster, course enrolment, and semester) were analysed using frequency counts and percentages to describe the sample composition. Second, descriptive statistics were computed for all measurement items across the five latent constructs (perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence). For each item, the mean and standard deviation were calculated to assess the central tendency and variability of the responses. These item-level statistics were reported at both the construct and subconstruct levels to offer insights into respondents' perceptions before proceeding to the measurement model.

3.14.2 Covariance-Based Structural Equation Modelling (CB-SEM)

Structural equation modelling (SEM) exists in two primary forms: Covariance-Based SEM (CB-SEM) and Variance-Based SEM (PLS-SEM). These two approaches differ in terms of their objectives, estimation techniques, model evaluation criteria and underlying statistical assumptions. Table 3.51 summarises the key differences between the two techniques which were adapted from Dash and Paul (2021).

Table 3.51
Comparison between CB-SEM and VB-SEM (Dash & Paul, 2021)

Aspect	Covariance-Based SEM (CB-SEM)	Variance-Based SEM (VB-SEM)
Objective	Confirmatory – theory testing and model validation	Exploratory – theory development and prediction
Estimator Type	Maximum Likelihood Estimation (MLE)	Ordinary Least Squares
Statistical Assumptions	Parametric (requires multivariate normality)	Non-parametric (distribution free)
Sample Size Requirement	Larger sample sizes recommended (>200 cases)	Can be used with smaller sample sizes (<200 cases)
Model Fit Evaluation	Provides global goodness-of-fit indices (e.g. RMSEA, CFI)	Does not provide global fit indices and instead uses local fit measures
Handling of Measurement Error	Explicitly estimates measurement error	Less robust handling of measurement error
Software	AMOS, LISTEL, Mplus	SmartPLS, PLS-Graph, WarpPLS
Mediation Testing	Allows simultaneous estimation of direct and indirect effects	Conducted through sequential regressions
Use in This Study	Selected method due to confirmatory nature, large sample size and multivariate normality	Not selected due to lack of global model fit

In this study, CB-SEM was implemented through AMOS, uses the Maximum Likelihood Estimator (MLE) and assumes multivariate normality. MLE is widely regarded as the most reliable estimation method in SEM because of its asymptotic unbiasedness and consistency in estimating model fit indices (Hair & Alamer, 2022). In line with the use of MLE, CB-SEM emphasises model fit and provides global goodness-of-fit indices which makes it ideal for confirmatory analysis. In contrast, VB-SEM (also known as PLS-SEM) relies on Ordinary Least Squares (OLS) estimation and is typically used in exploratory research, especially when data normality or sample size assumptions are not met (Henseler et al., 2009).

The selection of CB-SEM over VB-SEM for this study was supported by several justifications. First, the CB-SEM provides a comprehensive suite of model fit indices (e.g., RMSEA, CFI, TLI, and Chi-square/df), enabling a comprehensive evaluation of the measurement and structural model. PLS-SEM lacks this feature and instead relies on local fit statistics such as composite reliability and AVE, which are insufficient for evaluating overall model adequacy (Dash & Paul, 2021).

Second, the dataset for this study met the conditions typically required for CB-SEM, including a large sample size and acceptable levels of multivariate normality. According to Hair et al. (2010), CB-SEM is preferable when the sample exceeds 200 and the data meet parametric assumptions, as it yields more efficient and unbiased parameter estimates.

Third, CB-SEM is superior for testing mediation effects, particularly when multiple mediators and pathways are involved. This allows for the simultaneous estimation of direct and indirect effects while accounting for measurement error, which enhances the validity and reliability of the mediation analysis. While mediation can also be tested using multiple regression in SPSS, such methods do not provide explicit estimates of measurement error and cannot model complex structural relationships within a single analytical framework (Awang, 2015; Byrne, 2001; Hair et al., 2010).

For these reasons, CB-SEM was adopted to validate the measurement and structural model and test the hypothesised relationships among the latent constructs. CB-SEM is widely recognised for its suitability in confirmatory research where the objective is to evaluate theory-driven models using observed data (Henseler & Schuberth, 2024). The following step-by-step data analysis procedures employed in this study is illustrated in Figure 3.13. The next section discusses the procedures for assessing and validating the measurement model.

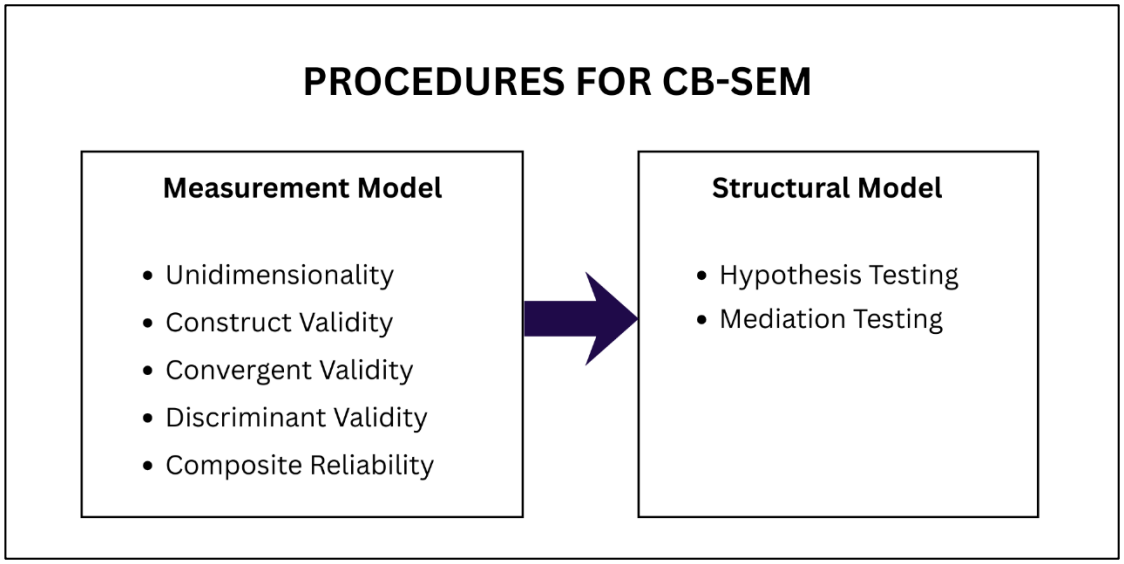


Figure 3.13 Procedures for CB-SEM

Having established the justifications for using CB-SEM and providing an overview the procedures, the next subsection specifies the procedures and criteria that will be used for the measure model of this study.

3.14.2.1 Measurement Model

In structural equation modelling (SEM), the measurement model specifies the relationships between latent constructs and their observed indicators to establish the reliability and validity of the research instrument (Awang, 2015). As such, the measurement model must be rigorously assessed before proceeding to the structural model which examines the hypothesised relationships among latent constructs.

The statistical analysis used to assess the measurement model is confirmatory factor analysis (CFA). CFA is a theory-driven procedure that tests whether the data fit a predefined factor structure based on theoretical expectations (Lewis, 2017). CFA also establishes three key forms of validity: convergent validity, construct validity, and discriminant validity. CFA is also critical for assessing unidimensionality and composite reliability. Key indicators such as factor loadings, average variance extracted (AVE), composite reliability (CR), and model fit indices such as CFI, TLI, and RMSEA, were used to determine the adequacy of the measurement model to confirm that the measurement model is robust and valid.

In this study, CFA was employed to validate the five latent constructs: perceived autonomy support, feedback literacy, grit, intrinsic motivation and oral presentation competence. The subsequent sections further detail the CFA requirements and procedures undertaken.

Unidimensionality

Unidimensionality refers to the extent to which a set of observed indicators measures a single latent construct. It is a fundamental requirement in structural equation modelling (SEM) that ensures the construct is internally consistent and valid to allow for valid and unbiased assessment of relationships among constructs (Liu et al., 2023; Ziegler & Hagemann, 2015). Accordingly, the assessment of unidimensionality must be completed before proceeding with construct validity and reliability tests.

In this study, unidimensionality was evaluated by examining the factor loadings of each item within its respective construct. Items with low factor loadings (typically below 0.60) were removed to enhance model clarity and parsimony. For newly developed instruments, a more lenient threshold of 0.50 may be accepted while for established items, the 0.60 cut-off remains the standard which was adopted for this study (Alias et al., 2021; Awang, 2015; Habsah et al., 2018; Shau, 2017).

If acceptable model fit is not achieved after the removal of low-loading items, modification indices (MI) are consulted to identify redundant item pairs. These may be resolved either by deleting one of the items or by specifying correlated errors to improve model fitness (Alias et al., 2021; Awang, 2015; Habsah et al., 2018). All retained indicators must exhibit positive and unidirectional loadings which indicates that they contribute consistently to their respective constructs. Furthermore, the inter-construct correlations should not exceed 0.85 as values beyond this threshold may indicate multicollinearity and conceptual overlap (Habsah et al., 2018).

Once unidimensionality is established, the measurement model proceeds to assessing the construct validity. This validity is established through the model fit indices which are explained in the next subsection.

Construct Validity

Construct validity enables the evaluation of model fit which is essential to determine how well the hypothesised measurement model corresponds with the empirical data. This stage ensures that the measurement model is statistically adequate before proceeding with the structural model.

Model fit indices are typically categorised into three types: (1) absolute fit, (2) incremental fit, and (3) parsimonious fit. These indices provide a comprehensive view of the model's adequacy from different statistical perspectives. Table 3.52 presents the commonly used model fit indices, their acceptance thresholds, and the supporting literature that justifies their selection.

Table 3.52
Model Fit Indices and Acceptance Level as Indicated in Literature

Name of Category	Name of Index	Index Full Name	Acceptance Level	Literature
Absolute fit	Chi-Square	Discrepancy Chi Square	P-value > 0.05	Wheaton et al. (1977)
	RMSEA	**Root Mean Square of Error Approximation**	**RMSEA < 0.1**	**Browne and Cudeck (1992)**
	GFI	Goodness of Fit Index	GFI > 0.90	Joreskog and Sorbom (1980)
Incremental fit	AGFI	Adjusted Goodness of Fit	AGFI > 0.90	Tanaka and Huba (1985)
	CFI	**Comparative Fit Index**	**CFI > 0.9**	**Bentler (1990)**
	TLI	**Tucker-Lewis Index**	**TLI > 0.90**	**Bentler and Bonett (1980)**
	NFI	Normed Fit Index	NFI > 0.90	Bollen (1989)
Parsimonious fit	**Chisq/df**	**Chi Square/Degrees of Freedom**	**Chisq/df<5.0**	**Marsh and Hocevar (1985)**

In structural equation modelling, it is generally recommended that the measurement model demonstrates acceptable fit across the three main categories of fit indices. At least one index from each index from each category must meet the minimum recommended threshold (Awang, 2015, Hair et al., 2010). In this study, the bolded indices were selected to represent each category: Root Mean Square Error of Approximation (RMSEA) for absolute fit, Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) for incremental fit, and the Chi-Square to degrees of freedom ration (X^2/df) for parsimonious fit.

A measurement model is considered acceptable when it achieves an RMSEA value of less than 0.10, CFI and TLI values greater than 0.90, and a X^2/df ratio below 5.00 (Bentler, 1990; Browne & Cudeck, 1992; Marsh & Hocevar, 1985). In this study, all second-order constructs were assessed using these indices. The model was retained only when the results demonstrated satisfactory fit across the three categories which confirms the statistical adequacy of the measurement model. Once the model fit by means of these indices has been established, the construct validity of the measurement will be assessed which is explained in the next section.

Convergent Validity

Convergent validity, a subtype of construct validity, refers to the extent to which items that are theoretically expected to measure the same construct are statistically correlated. It reflects the degree of confidence that the observed indicators consistently represent the intended latent variable (Cheung et al., 2024; Gallo et al., 2025).

A key statistical measure used to assess convergent validity is average variance extracted (AVE) which represents the average proportion of variance explained by a latent construct in relation to the total variance including error (dos Santos & Cirillo, 2023). According to Fornell and Larcker (1981) and Hair et al. (2010), an AVE value of 0.50 or higher is considered acceptable as this indicates that the construct explains at least 50% of the variance in its indicators. AVE values exceeding 0.70 are regarded as highly desirable as it signifies strong convergent validity.

One common reason for low AVE values is the inclusion of items with low factor loadings which dilute the shared variance among indicators. Therefore, it is essential to identify and revise or remove such items during the initial stages of model refinement (Awang, 2015). In this study, the AVE was computed by summing the squared standardised factor loadings of all items within a construct and dividing the total by the number of items (Hair et al., 2021; Handriana, 2016). Establishing adequate AVE supports the assertion that the latent construct is well-represented by its indicators.

Composite Reliability

Reliability is the degree of consistency of a measure in measuring the proposed latent construct. In this study, the reliability of each latent construct in the measurement model was assessed using composite reliability (CR) in line with recommendations from structural equation modelling literature (Alias et al., 2021; Awang, 2015; Habsah et al., 2018; Hair et al., 2010).

Composite Reliability (CR) assesses the internal consistency of a latent construct. Unlike Cronbach's alpha, CR accounts for the actual factor loadings of each item which provides a more accurate estimate of reliability within the structural equation modelling (SEM) framework (Hair et al., 2010; Lai, 2021). A CR value of 0.70 or higher is generally considered acceptable, though values between 0.60 and 0.70 may

be deemed adequate. CR values below 0.50 suggest inadequate internal consistency and may necessitate construct re-specification (Cheung et al., 2024; Yu et al., 2022).

Discriminant Validity

Discriminant validity refers to the extent to which a construct is empirically distinct from other constructs within a measurement model (Johnston et al., 2014). A construct-level correlation exceeding 0.85 may suggest multicollinearity or conceptual overlap, which raises concerns about the distinctiveness of the constructs (Kline, 2016).

In this study, discriminant validity was assessed using the Fornell-Larcker criterion which is widely used in covariance-based structural equation modelling. This method requires that the square root of the average variance extracted (AVE) for each latent construct be greater than its highest correlation with any other construct in the model (Fornell & Larcker, 1981), thus indicating that the construct shares more variance with its own indicators than (Hamid et al., 2017; Rönkkö & Cho, 2020).

Although the Heterotrait-Monotrait (HTMT) ratio was considered, the Fornell-Larcker criterion was deemed more suitable for this study as it is a technique suitable for covariance-based structural equation modelling (Afthanorhan et al., 2021) and is parsimonious (Hilkenmeier et al., 2020). Therefore, this Fornell-Larcker criterion was employed to establish the discriminant validity of the measurement model.

3.14.2.2 Structural Model

In the second stage of structural equation modelling (SEM), the structural model was examined to test the hypothesised relationships among the latent constructs based on the conceptual framework developed in this study. In this study, the structural model was specified with directional paths, which means that the relationships estimated through SEM are interpreted as predictive effects. For this reason, the hypotheses are phrased in terms of "influence," denoting the directional predictive effects tested through the model (Byrne, 2010; Hair et al., 2010; Kline, 2016). This interpretation is consistent with Garrido et al. (2022), who note that in SEM relationships are treated as causative rather than associative and can be decomposed into direct, indirect, and total influences.

The structural model of this study, as presented in Figure 3.14, was developed to (i) examine the direct effects of perceived autonomy support, feedback literacy, grit, and intrinsic motivation on oral presentation competence and (ii) evaluate the mediating effects of feedback literacy, grit, and intrinsic motivation on the relationships.

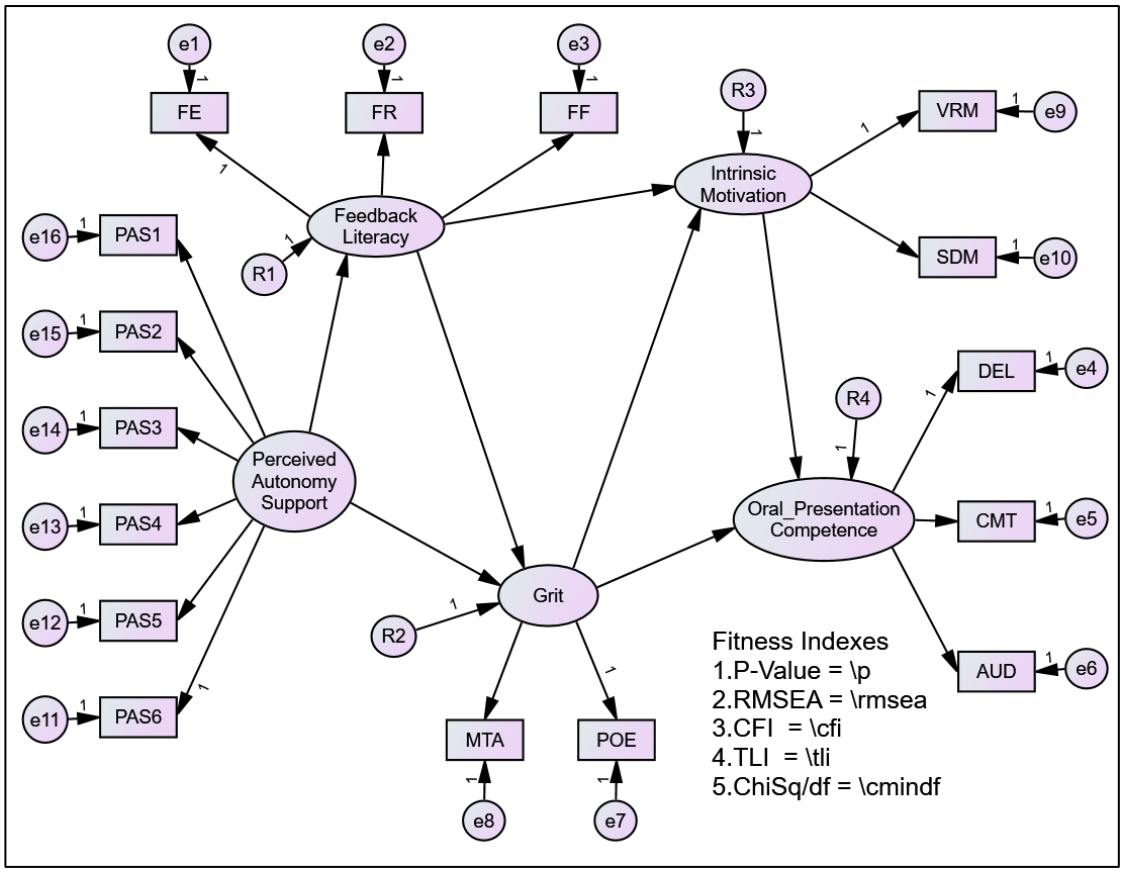


Figure 3.14 Structural Model of the Study

The assessment of the structural model involves examining the overall model fit and is followed by evaluating the path coefficients and significance levels to determine the strength and direction of hypothesised relationships. These analyses are discussed in detail in the subsequent subsections.

Hypothesis Testing

In this study, hypothesis testing was conducted as part of the structural model analysis to examine the sequential relationships among the latent constructs specified in the conceptual framework. Path analysis within the covariance-based structural equation modelling (CB-SEM) framework was employed using IBM-SPSS-AMOS.

This technique considers measurement error and model fit, which allowed for a simultaneous estimation of multiple structural paths.

Seven hypotheses were formulated based on the conceptual framework, focusing on the direct effects. Each path specified in the model corresponded to a hypothesis and their strength and statistical significance were evaluated using the standardised path coefficients and associated critical ratios. A list of the hypotheses tested are presented in Table 3.53 and the results are presented in Chapter 4.

Table 3.53
Hypotheses 1 to 4 (Sequential Hypotheses)

	Hypothesis Statement	Testing Method
H_1	Perceived autonomy support has a positive and significant effect on feedback literacy.	Path Analysis in SEM
H_2	Feedback literacy has a positive and significant effect on grit.	Path Analysis in SEM
H_3	Grit has a positive and significant effect on intrinsic motivation.	Path Analysis in SEM
H_4	Intrinsic motivation has a positive and significant effect on oral presentation competence	Path Analysis in SEM

Mediation Testing

Mediation analysis was conducted to explore the underlying processes through which an independent variable influences a dependent variable via an intervening construct. In this context, a direct effect refers to the influence of the independent variable on the dependent variable without a mediator, while an indirect effect refers to the portion of that relationship transmitted through a mediator (Gunzler et al., 2013; MacKinnon et al., 2007). A schematic representation of the direct and indirect effects is visualised in Figure 3.15.

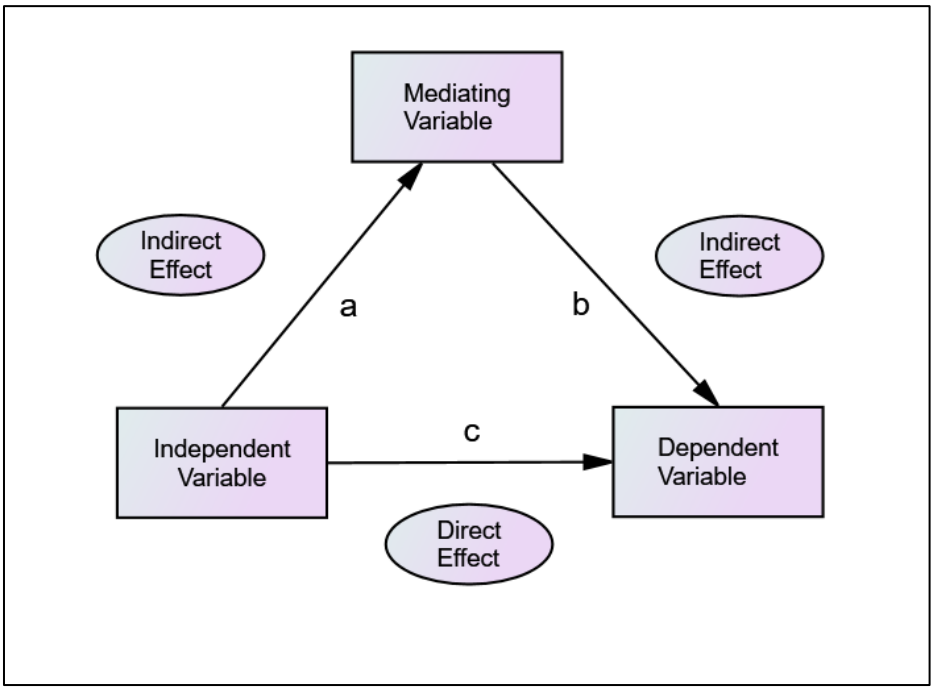


Figure 3.15 Mediator Schematic Diagram

Early approaches to mediation testing, such as those proposed by Baron and Kenny (1986), relied on a series of regression equations to assess the presence of mediation. However, subsequent research has highlighted the limitations of such methods, particularly their inability to model complex or simultaneous relationships and their reliance on the assumption that variables serve exclusively as causes or effects (Kraemer et al., 2001; MacKinnon, 2011).

In contrast, structural equation modelling (SEM) offers a more comprehensive and flexible framework for testing mediation. SEM allows for the simultaneous estimation of multiple pathways, accommodates measurement error, and is capable of handling models with multiple mediators and outcomes in a single analysis (Gunzler et al., 2013; Lowry & Gaskin, 2014). These advantages make SEM particularly suitable for studies involving complex theoretical models.

The study also employed bootstrapping, a resampling method recommended for verifying indirect effects in mediation analysis (Awang,2015; Bahkia et al., 2019). While researchers may choose between 500 and 5000 bootstrap samples and confidence intervals from 90% to 99%, this study used 1000 bootstrap samples, with both standard and bias-corrected confidence intervals set at 95%.

In this study, the influence of feedback literacy, grit, and intrinsic motivation as mediators in the model was examined. Accordingly, the following hypotheses are presented in Table 3.54.

Table 3.54
Hypotheses 5 to 7 (Sequentially Mediated Hypotheses)

	Hypothesis Statement	Statistical Analysis
H_5	Feedback literacy mediates the relationship between perceived autonomy support and grit.	Path Analysis in SEM and Bootstrapping
H_6	Grit mediates the relationship between feedback literacy and intrinsic motivation.	Path Analysis in SEM and Bootstrapping
H_7	Intrinsic motivation mediates the relationship between grit and oral presentation competence.	Path Analysis in SEM and Bootstrapping

3.15 Chapter Summary

This chapter presented a comprehensive overview of the research methodology employed in this study to develop a model of oral presentation competence among Malaysian undergraduates. The chapter began by outlining the research approach to provide the theoretical and methodological foundation for the study. It then detailed the unit of analysis, population, sampling strategy, and sample size determination to ensure methodological rigor and representativeness.

A key focus of this chapter was the research instrument, including its adaptation, validation, and reliability assessment. The instrument validation process involved preliminary research, expert reviews, pre-testing, and pilot testing which culminated in exploratory factor analysis (EFA). The EFA results were discussed to finalise the research instrument before proceeding with the data collection for the main study. Furthermore, the chapter elaborated the data collection procedures and data analysis techniques employed in this study. The next chapter presents the findings for descriptive analysis, confirmatory factor analysis, hypothesis testing and mediation testing.

CHAPTER 4
RESULTS

4.1 Introduction

This chapter presents the results of this study. First, the results of the descriptive analyses are presented for the key constructs (perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence). The chapter then proceeds with individual and pooled confirmatory factor analyses (CFA) to assess the validity, reliability, and model fit of the measurement model. The final section presents the results of structural equation modelling which include both hypothesis and mediation testing.

4.2 Descriptive Statistics of Constructs

Descriptive analysis explains the fundamental characteristics of a dataset by providing clear and concise summaries of the sample and the measures used (Cooksey, 2020). In this study, the descriptive analysis focused on undergraduate students' perceptions of the 76 items measuring the five key constructs examined in the field study questionnaire: (1) perceived autonomy support, (2) feedback literacy, (3) grit, (4) intrinsic motivation, and (5) oral presentation competence. To gauge their extent of agreement with the statements, a 10-point interval scale was employed, ranging from 1 (strongly disagree) to 10 (strongly agree).

Descriptive statistics, including mean scores and standard deviations, provide insights into response patterns (Bulanov et al., 2021) and the variability of scores (Choi & Wong, 2016; Gaddis & Gaddis, 1990) within each construct and sub-construct. Integrating both measures allowed for a more comprehensive understanding of the distribution of responses and the underlying patterns in the constructs being investigated, as discussed in the subsequent sections.

4.2.1 Descriptive Statistics for Perceived Autonomy Support

This section presents the descriptive statistics for perceived autonomy support. which was measured using six items (PAS1-PAS6). The mean and standard deviation values for each item in this construct are reported in Table 4.1.

Table 4.1
Descriptive Statistics for Perceived Autonomy Support

Item Label	Item Statement	Mean	Standard Deviation
PAS6	I feel my lecturer considers my vision for my oral presentations before giving suggestions.	8.50	1.451
PAS2	I felt that my lecturer understood my needs while I was preparing for my oral presentations	8.45	1.450
PAS4	I am encouraged by my lecturer to ask questions while preparing for my oral presentations.	8.36	1.528
PAS5	I feel my lecturer values my preferences for conducting my oral presentations.	8.35	1.464
PAS3	I feel confident in my oral presentations due to my lecturer's encouragement.	8.28	1.463
PAS1	I am provided with different ideas for my oral presentations by my lecturer.	8.23	1.525
	Overall	8.36	1.480

Table 4.1 shows that all six items recorded the respondents generally perceived a high level of autonomy support from their lecturers, as evidenced by mean scores exceeding 8.00 for all six items. The highest-rated item was PAS6 "*I feel my lecturer considers my vision for my oral presentations before giving suggestions*" (M=8.50, SD=1.451). This indicates strong agreement among respondents that they placed value on lecturers acknowledging their input before offering guidance. Following closely, PAS2 "*I felt that my lecturer understood my needs while I was preparing for my oral presentations*" also received a high mean score (M=8.45, SD=1.450), which reinforces the perception that the respondents believed their lecturers were responsive to their individual needs.

Other items, such as PAS3 "I feel confident in my oral presentations due to my lecturer's encouragement" (M=8.28, SD=1.463), PAS4 "I am encouraged by my lecturer to ask questions while preparing for my oral presentations" (M=8.36,

SD=1.528), and PAS5 "I feel my lecturer values my preferences for conducting my oral presentations" (M=8.35, SD=1.464), also demonstrated consistently high ratings which reflect the students' overall positive agreement with autonomy support.

The lowest-rated item, though still rated positively, is PAS1 "*I am provided with different ideas for my oral presentations by my lecturer*" (M=8.23, SD=1.525). This suggests that the respondents generally valued the variety of ideas offered by their lecturers.

In summary, the overall mean score of 8.36 (SD=1.480) for perceived autonomy support suggest that the respondents perceived they are well supported by their lecturers, particularly in terms of receiving encouragement, understanding, and consideration of their preferences. The next section further explores the descriptive analysis of feedback literacy.

4.2.2 Descriptive Statistics for Feedback Literacy

This section presents the descriptive statistics for feedback literacy, which consists of three subconstructs: feedback resilience (FR), feedback engagement (FE), and feedback facilitation (FF). Table 4.2 presents the overall mean score for the feedback literacy construct and individual mean scores and standard deviations for each subconstruct.

Table 4.2
Descriptive Statistics for Feedback Literacy

Subconstruct Label	Subconstruct	Mean	Standard Deviation
FR	Feedback Resilience	8.35	1.379
FE	Feedback Engagement	8.28	1.338
FF	Feedback Facilitation	7.98	1.514
	Overall	8.20	1.410

As shown in Table 4.2, the overall mean for feedback literacy was 8.20 (SD=1.410). Among the three subconstructs, the highest mean was recorded for feedback resilience (M=8.35, SD=1.379). This suggests that the respondents perceived themselves as highly capable of handling and adapting to feedback they received.

A high mean score was also recorded by feedback engagement (M=8.28, SD=1.338). This reflects the respondents' self-perceived strong willingness to seek, interpret, and apply feedback in their oral presentation learning process.

In contrast, the lowest mean was received by feedback facilitation (M=7.98, SD=1.514), which indicates that while the respondents actively engaged with and responded to feedback, they perceive that they may be less confident in peer feedback processes. A more comprehensive presentation of the descriptive statistics for each subconstruct of feedback literacy is provided in Sections 4.2.2.1-4.2.2.3.

4.2.2.1 Descriptive Statistics for Feedback Resilience

Feedback resilience (FR) is a subconstruct of feedback literacy and was measured using six items. Table 4.3 presents the descriptive statistics for feedback resilience which shows an overall mean of 8.35.

Table 4.3
Descriptive Statistics for Feedback Resilience

Item Label	Item Statement	Mean	Standard Deviation
FR3	I am open to reasonable criticism about my oral presentations.	8.45	1.446
FR1	I check whether my presentation is better after I have acted on the feedback.	8.44	1.317
FR2	I keep comments on previous presentations to use again in the future.	8.41	1.323
FR4	I deal well with any negative emotional responses I have to feedback information.	8.37	1.365
FR5	I find ways to use feedback constructively even if it is negative.	8.26	1.419
FR6	I fully utilise the feedback received even if it is negative.	8.20	1.407
	Overall	8.35	1.379

As shown in Table 4.3, all six items recorded mean scores above 8.00. The highest mean score was recorded by FR3 "*I am open to reasonable criticism about my oral presentations*" (M=8.45, SD=1.446). This suggests that the respondents perceived themselves to exhibit a strong willingness to accept constructive feedback. Following closely, the high mean scores of FR1 "*I check whether my presentation is better after I have acted on the feedback*" (M=8.44, SD=1.317) and FR2 "*I keep comments on previous presentations to use again in the future*" (M=8.41, SD=1.323) indicate strong agreement among the respondents that they tracked their progress after incorporating feedback and recognised the value of storing feedback for continuous improvement.

The lowest-rated item was attained by FR6 "*I fully utilise the feedback received even if it is negative*" (M=8.20, SD=1.407). This indicates that while the students recognised the importance of feedback, some perceived to struggle with implementing critical feedback in full.

Overall, the strong overall mean score of 8.35 (SD=1.379) highlights that the respondents perceived themselves as demonstrating strong feedback resilience. The next section discusses the descriptive statistics for feedback engagement.

4.2.2.2 Descriptive Statistics for Feedback Engagement

Feedback engagement (FE) is a subconstruct of feedback literacy and was measured using ten items. Table 4.4 presents the descriptive statistics for feedback engagement, with an overall mean of 8.28.

Table 4.4
Descriptive Statistics for Feedback Engagement

Item Label	Item Statement	Mean	Standard Deviation
FE10	I use comments on my presentation to refine my understanding of what a good quality presentation looks like.	8.43	1.334
FE1	I reflect on the quality of my oral presentations after receiving feedback.	8.34	1.300
FE4	I listen or read thoughtfully when other people provide me with input about my oral presentations.	8.32	1.345
FE6	I ask for comments about specific aspects of my oral presentations.	8.32	1.382
FE9	I consider how comments relate to the rubrics of the oral presentations.	8.32	1.260
FE7	I carefully consider comments about my presentations before deciding if I will use them or not.	8.27	1.301
FE3	I seek out examples of good work to improve my oral presentation.	8.25	1.367
FE5	I consider comments I have received on similar tasks when I am working on my oral presentations.	8.25	1.400
FE2	I use my reflection as a source of information to improve my oral presentations.	8.19	1.300
FE8	I determine which feedback that I will use when receiving conflicting feedback about my oral presentations.	8.17	1.391
	Overall	8.28	1.338

Table 4.4 presents the mean score of feedback engagement items which ranged from 8.17 to 8.43. The highest mean score was recorded by FE10 "*I use comments on my presentation to refine my understanding of what a good quality presentation looks like*" (M=8.43, SD=1.334). This indicates that the respondents perceived feedback as a valuable resource for understanding presentation quality and performance expectations. High mean scores were also attained by FE1 "*I reflect on the quality of my oral presentations after receiving feedback*" (M=8.34, SD=1.300) and FE4 "*I listen or read thoughtfully when other people provide me with input about my oral presentations*" (M=8.32, SD=1.345), which shows strong agreement among the respondents that they actively reflected on feedback and paid close attention to the input given.

A high mean score was also obtained by FE6 "*I ask for comments about specific aspects of my oral presentations*" (M=8.32, SD=1.382), showing respondents' perceived active participation in feedback-seeking behaviours. Also, the high mean scores for FE3 "*I seek out examples of good work to improve my oral presentation*" (M=8.25, SD=1.367) and FE5 "*I consider comments I have received on similar tasks when I am working on my oral presentations*" (M=8.25, SD=1.400) demonstrate agreement that the respondents rely on both external models and prior feedback experiences.

The lowest mean score was recorded for FE8 "*I determine which feedback I will use when receiving conflicting feedback about my oral presentations*" (M=8.17, SD=1.391). The lower mean score suggests that respondents believe they may slightly struggle with evaluating and reconciling conflicting feedback sources.

Overall, the strong overall mean score of 8.28 (SD=1.338) signifies that respondents expressed a consistently high level of agreement across all items of feedback engagement. The next section discusses the descriptive statistics for feedback facilitation.

4.2.2.3 Descriptive Statistics for Feedback Facilitation

In this study, feedback facilitation (FF), a subconstruct of feedback literacy, was measured using six items. Table 4.5 presents the descriptive statistics for feedback facilitation, with an overall mean of 7.98 (SD=1.514).

Table 4.5
Descriptive Statistics for Feedback Facilitation

Item Label	Item Statement	Mean	Standard Deviation
FF1	I offer constructive feedback when commenting on others' oral presentations.	8.11	1.433
FF3	I take the initiative to refer to rubrics when commenting on other people's oral presentations.	8.07	1.436
FF6	I cross-check my feedback about others' oral presentations.	7.98	1.506
FF5	I try to be very clear when providing feedback to others.	7.97	1.530
FF4	I offer to provide feedback to my peers.	7.89	1.581
FF2	I comment on other people's oral presentations when I am invited to.	7.85	1.595
	Overall	7.98	1.514

Table 4.5 shows that the mean scores for feedback facilitation items ranged from 7.85 to 8.11. The highest mean score was recorded by FF1 "*I offer constructive feedback when commenting on others' oral presentations*" (M=8.11, SD=1.433) which shows the highest level of agreement among the respondents. The second highest mean score was obtained by FF3 "*I take the initiative to refer to rubrics when commenting on other people's oral presentations*" (M=8.07, SD=1.436), indicating strong agreement among respondents with aligning their feedback to evaluation criteria.

At the lower end, FF2 "*I comment on other people's oral presentations when I am invited to*" recorded the lowest mean (M=7.85, SD=1.595), followed closely by FF4 "*I offer to provide feedback to my peers*" (M=7.89, SD=1.581). These items received comparatively lower levels of agreement, though still within the high-agreement range. The remaining items, FF6 (M=7.98, SD=1.506) and FF5 (M=7.97, SD=1.530), fell in the middle range.

In conclusion, respondents' agreement to feedback facilitation items demonstrated relatively high levels of agreement, with mean scores clustered between 7.85 and 8.11 and an overall mean of 7.98 (SD = 1.51). The next section reports the descriptive statistics for grit, the third construct in this study.

4.2.3 Descriptive Statistics for Grit

This section presents the descriptive analysis of the two grit subconstructs: perseverance of effort (POE) and mastery through actions (MTA). Table 4.6 summarises the overall means score for grit, as well as the mean and standard deviation values for both subconstructs.

Table 4.6
Descriptive Statistics for Grit

Subconstruct Label	Sub Construct	Mean	Standard Deviation
MTA	Mastery Through Actions	8.34	1.369
POE	Perseverance of Effort	8.12	1.464
	Overall	8.23	1.417

Table 4.6 presents that the overall mean score for grit was 8.23 (SD=1.417), which indicates a high level of agreement among respondents. Between the two subconstructs, mastery through actions recorded the higher mean (M=8.34, SD=1.369), which reflects strong agreement with items related to mastery-oriented behaviours. Perseverance of effort recorded a mean of 8.12 (SD=1.464), also showing a high level of agreement, although slightly lower compared to MTA.

A more comprehensive breakdown of the mean and standard deviation values for each item within mastery through actions and perseverance of effort is provided in Table 4.7 and Table 4.8, respectively.

4.2.3.1 Descriptive Statistics for Mastery Through Actions

In this study, mastery through actions, a subconstruct of a grit, was measured using seven items. Table 4.7 presents the descriptive statistics for mastery through actions (MTA), showing an overall mean of 8.34 (SD=1.369).

Table 4.7
Descriptive Statistics for Mastery Through Action

Item Label	Item Statement	Mean	Standard Deviation
MTA4	I am committed to doing my best for my oral presentations.	8.58	1.302
MTA5	I am dedicated to completing all tasks for my oral presentations.	8.50	1.373
MTA6	I put in significant effort for my oral presentations.	8.43	1.324
MTA2	I make sure to stay focused for my oral presentations.	8.41	1.344
MTA7	I am determined to maintain my learning progress in oral presentations.	8.36	1.356
MTA1	I actively seek new ideas for my oral presentations.	8.09	1.472
MTA3	I proactively develop new ideas for my oral presentations.	7.99	1.418
	Overall	8.34	1.369

As shown in Table 4.7, the mean scores for mastery through actions ranged from 7.99 to 8.58 which are within the high-agreement level. The highest mean was recorded for MTA4 "*I am committed to doing my best in my oral presentations*" (M=8.58, SD=1.302). High levels of agreement were also recorded for MTA5 "*I am dedicated to completing all tasks*" (M=8.50, SD=1.373) and MTA6 "*I put in significant effort for my oral presentations*" (M=8.43, SD=1.324).

MTA2 "*I make sure to stay focused*" (M = 8.41, SD = 1.34) and MTA7 "*I am determined to maintain my learning progress*" (M = 8.36, SD = 1.36) also showed high agreement, reflecting students' consistency in maintaining attention and progress. The lowest mean scores were recorded for MTA1 "*I actively seek new ideas*" (M = 8.09, SD = 1.47) and MTA3 "*I proactively develop new ideas*" (M = 7.99, SD = 1.42). Although these items received comparatively lower ratings, the means remained above 8.00, showing that respondents still expressed agreement with them.

The overall mean score for mastery through actions was 8.34 (SD = 1.37), confirming generally high agreement across all seven items in this subconstruct. The following section presents a descriptive analysis of perseverance of effort, the second subconstruct of grit.

4.2.3.2 Descriptive Statistics for Perseverance of Effort

In this study, perseverance of effort, a subconstruct of grit, was measured using five items. Table 4.8 presents the descriptive statistics for this subconstruct, showing an overall mean of 8.12 (SD=1.464).

Table 4.8
Descriptive Statistics for Perseverance of Effort

Item Label	Item Statement	Mean	Standard Deviation
POE1	I consistently work on my English to improve my oral presentations.	8.24	1.506
POE3	I consistently seek to learn more about oral presentations.	8.14	1.473
POE2	I dedicate time to improving my English for my oral presentations.	8.13	1.404
POE5	I always set goals for my oral presentations.	8.13	1.413
POE4	I consistently stay focused when learning about oral presentations.	7.97	1.525
	Overall	8.12	1.464

Table 4.8 presents that the mean scores for perseverance of effort ranged from 7.97 to 8.24. The highest mean score was recorded for POE1 "*I consistently work on my English to improve my oral presentations*" (M=8.24, SD=1.51). This indicates a high level of agreement with continuous effort to improve language skills for presentations. Table 5.8 further demonstrates that items POE3 "*I consistently seek to learn more about oral presentations*" (M=8.14, SD=1.47), POE2 "*I dedicate time to improving my English*" (M=8.13, SD=1.40), and POE5 "*I always set goals for my oral presentations*" (M=8.13, SD=1.41) received high agreement levels.

On the other hand, the lowest mean score in this subcontract was obtained by POE4 "*I consistently stay focused when learning about oral presentations*" (M=7.97, SD=1.53). Although this item received lower agreement than the other items, the mean score was within the high-agreement range, reflecting consistency in students' perceptions of their focus.

Overall, the mean score for perseverance of effort was 8.12 (SD=1.46). This confirms that respondents expressed a high level of agreement across all five items in

this subconstruct. The following section presents a descriptive analysis of intrinsic motivation, the fourth construct in this study.

4.2.4 Descriptive Statistics for Intrinsic Motivation

This section presents the descriptive statistics for intrinsic motivation which was measured through two subconstructs: satisfaction-driven motivation (SDM) and value-recognition motivation (VRM). Table 4.9 presents the overall mean score for intrinsic motivation and its subconstructs.

Table 4.9
Descriptive Statistics for Intrinsic Motivation

Subconstruct Label	Sub Construct	Mean	Standard Deviation
VRM	Value-Recognition Motivation	8.40	1.439
SDM	Satisfaction-Driven Motivation	7.81	1.816
	Overall	8.10	1.628

Table 4.9 depicts that the overall mean for intrinsic motivation was 8.10 (SD=1.628), which indicates a high level of agreement across the construct. However, a notable difference was observed between these two subconstructs.

Value-recognition motivation (VRM) recorded a higher mean (M=8.40, SD=1.44), showing that students agreed more strongly that oral presentations are beneficial for their academic development and future careers. In comparison, satisfaction-driven motivation (SDM) recorded a lower mean (M=7.81, SD=1.82). Although still within the high-agreement range, this score reflected weaker agreement with items relating to enjoyment and personal satisfaction.

Taken together, the results suggest that respondents' intrinsic motivation to participate in oral presentations was influenced more strongly by recognising the academic and professional value of these tasks than by enjoyment or personal satisfaction alone. To further explore this construct, Table 4.10 and Table 4.11 report the descriptive statistics for value-recognition motivation and satisfaction-driven motivation, respectively.

4.2.4.1 Descriptive Statistics for Value-Recognition Motivation

Value-recognition motivation (VRM), the first subconstruct of intrinsic motivation, was measured using seven items. Table 4.10 presents the descriptive statistics for VRM, with an overall mean score of 8.40 (SD=1.439).

Table 4.10
Descriptive Statistics for Value-Recognition Motivation

Item Label	Item Statement	Mean	Standard Deviation
VRM7	I believe delivering oral presentations is essential for building my confidence.	8.65	1.385
VRM3	I find it important to do well in oral presentations.	8.61	1.340
VRM6	I believe delivering oral presentations is crucial for enhancing my communication skills.	8.59	1.396
VRM5	I believe that delivering oral presentations is valuable for my future career.	8.48	1.378
VRM2	I am committed to putting in my best effort for my oral presentations.	8.36	1.411
VRM4	I recognise the value that oral presentations offer me.	8.14	1.536
VRM1	I feel increasingly competent in oral presentations with each practice session.	7.95	1.628
	Overall	8.40	1.439

Table 4.10 depicts that the mean scores for VRM ranged from 7.95 to 8.65. The highest mean was recorded for VRM7 "*I believe delivering oral presentations is essential for building my confidence*" (M=8.65, SD=1.385). This is followed closely by VRM3 "*I find it important to do well in oral presentations*" (M=8.61, SD=1.340) and VRM6 "*I believe delivering oral presentations is crucial for enhancing my communication skills*" (M=8.59, SD=1.396). These findings indicate that respondents strongly agreed with items that emphasised the value of oral presentations.

The lowest mean score was observed for VRM1 "*I feel increasingly competent in oral presentations with each practice session*" (M=7.95, SD=1.628). Although still within the high-agreement range, this lower score shows weaker agreement with the perception of consistent improvement through practice.

Overall, the subconstruct recorded a mean of 8.40 (SD = 1.439), reflecting high levels of value-recognition motivation, with students perceiving oral presentations as

important for academic success and professional growth, while showing comparatively less agreement on the extent to which practice consistently improves competence. The next section reports the descriptive results for satisfaction-driven motivation.

4.2.4.2 Descriptive Statistics for Satisfaction Driven Motivation

Satisfaction-driven motivation (SDM), the second subconstruct of intrinsic motivation, was measured using eight items. Table 4.11 presents the descriptive statistics for SDM, with an overall mean score of 7.81 (SD=1.816)

Table 4.11
Descriptive Statistics for Satisfaction-Driven Motivation

Item Label	Item Statement	Mean	Standard Deviation
SDM1	I find satisfaction in preparing for my oral presentations.	8.14	2.016
SDM5	I find it fulfilling to share my ideas through oral presentations.	7.95	1.707
SDM6	I feel a sense of satisfaction with my performance in oral presentations.	7.86	1.617
SDM2	I feel a sense of enjoyment when I am presenting.	7.78	1.684
SDM3	I find presenting to an audience is a rewarding experience.	7.78	1.718
SDM8	I feel excited to share my oral presentation content with the audience.	7.74	1.810
SDM4	I genuinely enjoy giving oral presentations.	7.66	1.949
SDM7	I feel a sense of calm when delivering my oral presentations.	7.53	2.030
	Overall	7.81	1.816

Table 4.11 shows that the mean scores for SDM ranged from 7.53 to 8.14. The highest mean was recorded for SDM1 "*I find satisfaction in preparing for my oral presentations*" (M=8.14, SD=2.016), indicating stronger agreement with satisfaction derived from the preparatory phase. Other items such as SDM5 "*I find it fulfilling to share my ideas*" (M = 7.95, SD = 1.71) and SDM6 "*I feel a sense of satisfaction with my performance*" (M = 7.86, SD = 1.62) also showed relatively high agreement.

Conversely, the lowest mean was observed for SDM7 "*I feel a sense of calm when delivering my oral presentations*" (M=7.53, SD=2.030). This shows a weaker agreement with feeling calm during delivery. Other delivery-related items, such as SDM4 "*I genuinely enjoy giving oral presentations*" (M = 7.66, SD = 1.95) and SDM8 "*I feel excited to share my content*" (M = 7.74, SD = 1.81), also received lower mean scores compared to preparation-focused items.

Overall, the mean score of 7.81 (SD = 1.82) indicates that while respondents generally expressed agreement with satisfaction-driven motivation, their perceptions of enjoyment and satisfaction were stronger for preparation than for the actual delivery of oral presentations. The next section presents the descriptive statistics for oral presentation competence, the final construct of this study.

4.2.5 Descriptive Statistics for Oral Presentation Competence

This section presents the descriptive statistics of the final construct, oral presentation competence (OPC). OPC comprises three subconstructs: content mastery (CMT), audience engagement (AUD) and delivery (DEL). Table 4.12 reports the mean scores and standard deviations for each subconstruct, along with the overall mean for the construct.

Table 4.12
Descriptive Statistics for Oral Presentation Competence

Subconstruct Label	Sub Construct	Mean	Standard Deviation
CMT	Content Mastery	8.46	1.388
AUD	Audience Engagement	8.26	1.453
DEL	Delivery	8.03	1.588
	Overall Mean	8.36	1.421

Table 4.12 demonstrates that the overall mean for OPC was 8.36 (SD=1.421), indicating that the respondents generally perceived themselves as competent in delivering oral presentations. Among the three subconstructs, content mastery (M=8.46, SD=1.39) recorded the highest mean, showing that respondents felt most confident in their ability to organise and articulate content effectively. Audience engagement (M=8.26, SD=1.45) recorded a moderate mean, suggesting that students acknowledged

the importance of engaging their audience, though with slightly lower confidence than content mastery. In contrast, delivery (M=8.03, SD=1.59) recorded the lowest mean, indicating comparatively less confidence in aspects related to presentation delivery.

Overall, the descriptive statistics indicate that respondents perceived themselves as most competent in content mastery, moderately in audience engagement, and least in delivery. These results are further explored in the following sections.

4.2.5.1 Descriptive Statistics for Content Mastery

Content mastery (CMT), the first subconstruct of oral presentation competence, was measured using seven items. As shown in Table 4.13, the overall mean for this subconstruct was 8.46 (SD=1.388).

Table 4.13
Descriptive Statistics for Content Mastery

Item Label	Item Statement	Mean	Standard Deviation
CMT4	I always ensure that my presentations contain accurate information.	8.56	1.297
CMT1	I always ensure that the content of my presentations matches with the assigned topic.	8.55	1.357
CMT3	I always ensure that the content of my presentations is well-organised.	8.46	1.343
CMT6	I always ensure that my key points are supported by evidence.	8.46	1.359
CMT2	I always ensure that the content of my presentations is clear.	8.44	1.446
CMT5	I always ensure that key points are highlighted in my oral presentations.	8.42	1.408
CMT7	I thoroughly prepare for my oral presentation in advance.	8.31	1.504
	Overall	8.46	1.388

Table 4.13 shows that the mean scores for content mastery ranged from 8.31 to 8.56, all within the high-agreement level. The highest mean was recorded for CMT4 "*I always ensure that my presentations contain accurate information*" (M=8.56, SD=1.297), followed closely by CMT1 "*I always ensure that the content of my presentations matches with the assigned topic*" (M=8.55, SD=1.357). These results suggest that students placed the greatest importance on content accuracy and topic relevance.

CMT3 "I always ensure that the content of my presentations is well-organised" (M=8.46, SD=1.343) and CMT6 "I always ensure that my key points are supported by evidence" (M=8.46, SD=1.359) also received high mean scores, indicating strong agreement with structuring and substantiating content. The lowest mean score was recorded for CMT7 "I thoroughly prepare for my oral presentation in advance" (M =8.31, SD=1.504). Although lower than the other items, this still reflected a high level of agreement with preparation.

Overall, the mean score of 8.46 (SD=1.388) indicates that students perceived themselves as demonstrating strong content mastery, particularly in ensuring accuracy, relevance, organisation, and clarity in their presentations. The next section discusses the descriptive statistics for audience engagement.

4.2.5.2 Descriptive Statistics for Audience Engagement

Audience engagement (AUD) is the second subconstruct of oral presentation competence measured using eight items. The overall mean for this construct, as presented in Table 4.14, for this subconstruct was 8.26 (SD=1.453).

Table 4.14
Descriptive Statistics for Audience Engagement

Item Label	Item Statement	Mean	Standard Deviation
AUD7	I dress in a manner that is appropriate for my oral presentations.	8.62	1.373
AUD3	I effectively use visual aids, graphics, and slides in my oral presentations.	8.44	1.404
AUD8	I always search for topics that might interest my audience for my oral presentations.	8.38	1.383
AUD1	I project my voice clearly during my oral presentations.	8.30	1.432
AUD6	I effectively use vocal stress to emphasise key points during my oral presentations.	8.14	1.526
AUD5	I maintain good control of my body positioning during my oral presentations.	8.07	1.455
AUD2	I always speak with enthusiasm during my oral presentations.	8.06	1.464
AUD4	I maintain good control of my physical movements during my oral presentations.	8.03	1.586
	Overall	8.26	1.453

Table 4.14 outlines that the mean scores for audience engagement items ranged from 8.03 to 8.62. The highest mean was for AUD7 "*I dress in a manner that is appropriate for my oral presentations*" (M=8.62, SD=1.373), indicating strong agreement with the importance of dressing appropriately as part of effective presentations. AUD3 "*I effectively use visual aids, graphics, and slides*" (M=8.44, SD=1.404) and AUD8 "*I always search for topics that might interest my audience*" (M=8.38, SD=1.383) also recorded high means, showing that students valued visual support and relevant topics as key aspects of audience engagement.

Item AUD1 "*I project my voice clearly*" recorded a mean of 8.30 (SD=1.432), also within the high-agreement range. The lower mean scores were observed for items such as AUD4 "*I maintain good control of my physical movements*" (M=8.03, SD=1.586), AUD2 "*I always speak with enthusiasm*" (M=8.06, SD=1.464), and AUD5 "*I maintain good control of my body positioning*" (M=8.07, SD=1.455). Although these items still indicate high agreement, they reflected comparatively weaker perceptions of audience engagement through movement and enthusiasm.

Overall, the mean score of 8.26 (SD=1.453) suggests that students perceived themselves as confident in audience engagement, particularly in structured aspects such as appropriate appearance, use of visual aids, and selection of relevant topics, while expressing comparatively lower confidence in movement control and expressive delivery. The next section presents the descriptive results for the final subconstruct of oral presentation competence, which is delivery.

4.2.5.3 Descriptive Statistics for Delivery

Delivery, the final subconstruct of oral presentation competence, was measured using six items. As shown in Table 4.15, the overall mean of this subconstruct was 8.03 (SD=1.588).

Table 4.15
Descriptive Statistics for Delivery

Item Label	Item Statement	Mean	Standard Deviation
DEL5	I incorporate effective gestures in my oral presentations.	8.23	1.467
DEL1	I maintain appropriate eye contact with the audience during my oral presentations.	8.16	1.515
DEL4	I demonstrate confidence during my oral presentations.	8.06	1.504
DEL2	I minimise my reliance on slides during my oral presentations.	8.00	1.578
DEL3	I seldom refer to my notes during my oral presentations.	7.92	1.735
DEL6	I actively engage the audience during the Q&A session.	7.79	1.730
	Overall	8.03	1.588

Table 4.15 shows that the mean scores for delivery items ranged from 7.79 to 8.23. The highest mean was recorded for DEL5 "*I incorporate effective gestures in my oral presentations*" (M=8.23, SD=1.467), followed by DEL1 "*I maintain appropriate eye contact with the audience during my oral presentations*" (M=8.16, SD=1.515).

These findings suggest that the students felt most competent their ability to use gestures and maintain eye contact with their audience during presentations.

At the lower end, DEL6 "*I actively engage the audience during the Q&A session*" recorded the lowest mean (M=7.79, SD=1.730), suggesting that the respondents might feel less competent in managing audience interactions. Another item, DEL3 "*I seldom refer to my notes during my oral presentations*" also reflected relatively lower agreement (M=7.92, SD=1.735).

Overall, the mean score of 8.03 (SD=1.588) suggests that while students reported high confidence in delivery overall, their perceptions were strongest in gesture use and eye contact and weakest in audience interaction and minimising reliance on notes. The next section presents the measurement model assessment which evaluates the reliability, validity, and model fit of all constructs using confirmatory factor analysis (CFA).

4.2.6 Summary of Descriptive Statistics of Constructs

This section presents the overall descriptive analysis of all constructs examined in the study. The mean scores and standard deviations provide an overview of how students perceived their experiences and competencies in relation to the psychological variables and oral presentation competence.

Table 4.16
Descriptive Statistics for All Constructs

Construct	Mean	Standard Deviation
Perceived Autonomy Support	8.36	1.480
Oral Presentation Competence	8.36	1.421
Grit	8.23	1.417
Feedback Literacy	8.20	1.410
Intrinsic Motivation	8.10	1.628

Overall, the descriptive results in Table 4.16 show that students reported moderately high perceptions across all constructs, with mean values ranging from 8.10 to 8.36 on a 10-point scale. Perceived autonomy support (M=8.36, SD=1.480) and oral presentation competence (M=8.36, SD=1.421) recorded the highest mean scores. Grit (M=8.23, SD=1.417) was also rated relatively high, followed closely by feedback

literacy (M=8.20, SD=1.410). Intrinsic motivation (M=8.10, SD=1.628) yielded the lowest mean, showing that it was rated slightly lower compared to other constructs. Having established the descriptive analysis, the next section proceeds to building the measurement model for the constructs and to conducting confirmatory factor analysis.

4.3 Measurement Model

A measurement model represents the relationships between observed indicators and their respective latent constructs which can be assessed through confirmatory factor analysis (CFA) (Alavi et al., 2020a; Cimino et al., 2020). In this study, CFA was conducted to validate the hypothesised factor structure and ensure that the observed variables reliably reflected their corresponding latent constructs.

Several criteria were considered during CFA. First, the model was examined for unidimensionality, defined as the condition where a set of items collectively reflects a single latent construct, allowing the total score to represent individual differences along a single continuum (Fried et al., 2016; Hattie, 1985; Segars, 1997; Whittington et al., 2022). Unidimensionality was assessed through item factor loadings, with items below 0.60 considered for removal.

Next, overall model fit was evaluated using established fit indices. Following Hu and Bentler (1999) and Hair et al. (2019), model fit was deemed acceptable when RMSEA < 0.08 (ideally < 0.06), CFI and TLI >0.90 (ideally > 0.95), and Chi-Square/df ratios < 5.0. While more lenient thresholds (e.g., CFI/TLI > 0.85, RMSEA < 0.10) are sometimes used in other scholarships (Awang, 2015; Awang et al., 2016, 2023), the present study adopted the stricter benchmarks recommended by Hu and Bentler (1999) and Hair et al. (2019) because the study involved both instrument validation and theory testing through CFA and SEM. Employing stricter fit criteria provided more rigorous evidence of measurement validity and structural model adequacy, thereby strengthening the robustness and credibility of the study findings.

Although several indices are presented in Table 4.17, only the bolded ones (RMSEA, CFI, TLI, and ChiSq/df) were used as the main criteria, as they are most frequently reported and widely recommend in SEM literature. In cases where the model failed to reach an acceptable fit, modification indices, residuals, and factor loadings were reviewed to detect possible sources of misfit (Byrne, 2009; Kline, 2016).

Table 4.17
Model Fit Categories, Indices, and Level of Acceptance

Name of category	Name of index	Level of acceptance
Absolute Fit Index	**RMSEA**	**RMSEA < 0.10**
	GFI	GFI > 0.85
Incremental Fit Index	AGFI	AGFI > 0.85
	CFI	**CFI > 0.85**
	TLI	**TLI > 0.85**
	NFI	NFI > 0.85
Parsimonious Fit Index	**ChiSq /df**	**Chi-Square/ Df < 5.0**

***The indexes in bold are recommended since they are frequently reported in literature
Source: Awang (2015)

Following model fit evaluation, construct validity was examined. Convergent validity was confirmed when two conditions were met: (i) all standardised factor loadings exceeded 0.50, and (ii) the average variance extracted (AVE) for each construct reached at least 0.50 (Awang, 2015; Hair et al., 2010). Internal consistency reliability was assessed using composite reliability (CR), with values ≥ 0.70 considered satisfactory (Goretzko et al., 2024). Discriminant validity was further evaluated using the Fornell-Larcker criterion to ensure constructs were empirically distinct.

Among the constructs examined, perceived autonomy support (PAS) emerged as a unidimensional factor and has no second-order construct based on prior exploratory factor analysis (EFA) results. Therefore, this construct was retained without further CFA validation (Awang, 2015; Kline, 2016). In contrast, feedback literacy, grit, intrinsic motivation, and oral presentation competence, were conceptualised as multidimensional constructs. Confirmatory factor analysis was therefore conducted to validate the factor structure of these constructs. The results are presented in the following subsections, beginning with feedback literacy.

4.3.1 Confirmatory Factor Analysis (CFA) for Feedback Literacy

A confirmatory factor analysis (CFA) was conducted to validate the underlying factor structure of the feedback literacy construct. The initial measurement model, shown in Figure 4.1, was specified based on exploratory factor analysis results. The construct was conceptualised as comprising three subconstructs: feedback engagement

(FE, 10 items), feedback resilience (FR, 6 items), and feedback facilitation (FF, 6 items), totalling 22 items.

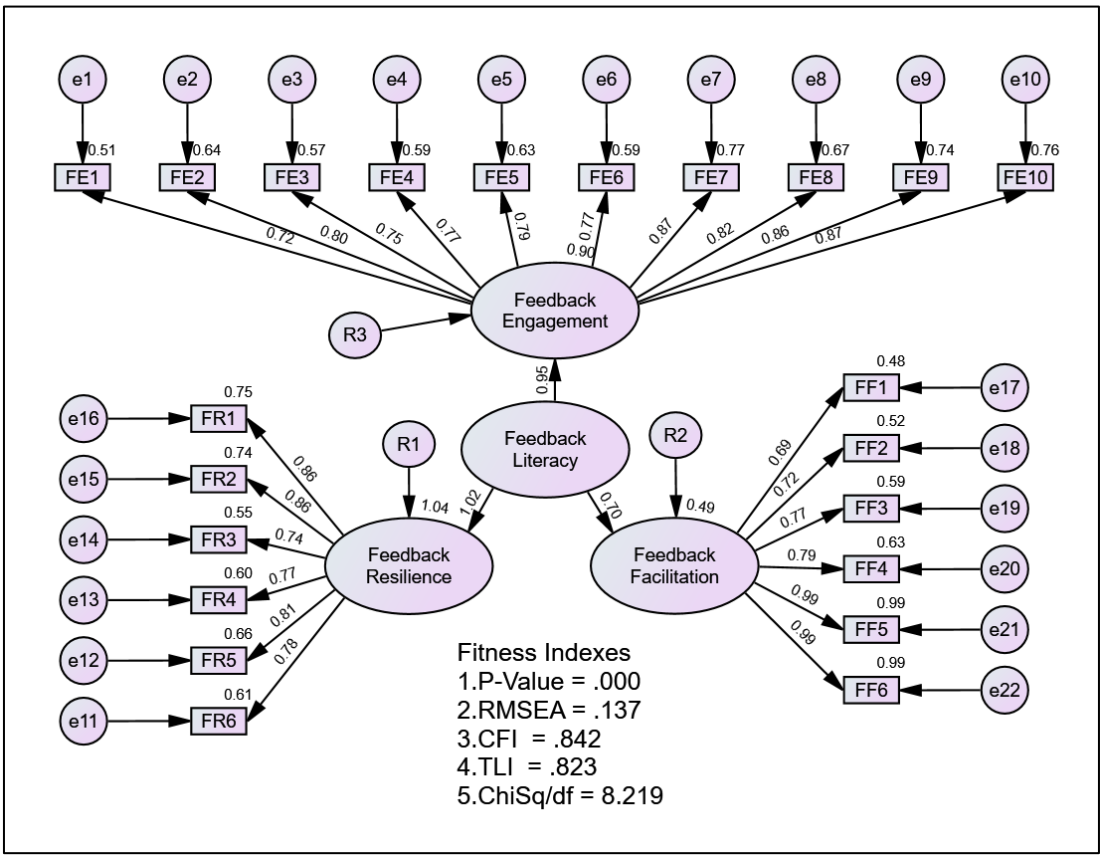


Figure 4.1 Initial Measurement Model for Feedback Literacy

As presented in Figure 4.1, all standardised factor loadings exceeded 0.60. This indicates unidimensionality across the three subconstructs (Awang, 2015; Hair et al., 2013). However, the initial model did not achieve acceptable fit thresholds (refer to Table 4.17). As shown in Figure 4.1, the RMSEA of the measurement model was 0.137, exceeding the maximum cutoff of 0.10. The incremental fit indices also fell below acceptable standards, with CFI at 0.842 and TLI at 0.823. The Chi-square/df ratio was 8.219, which further indicates a poor model fit. Residuals among conceptually overlapping items were correlated, and the model was subsequently re-analysed using all 22 items.

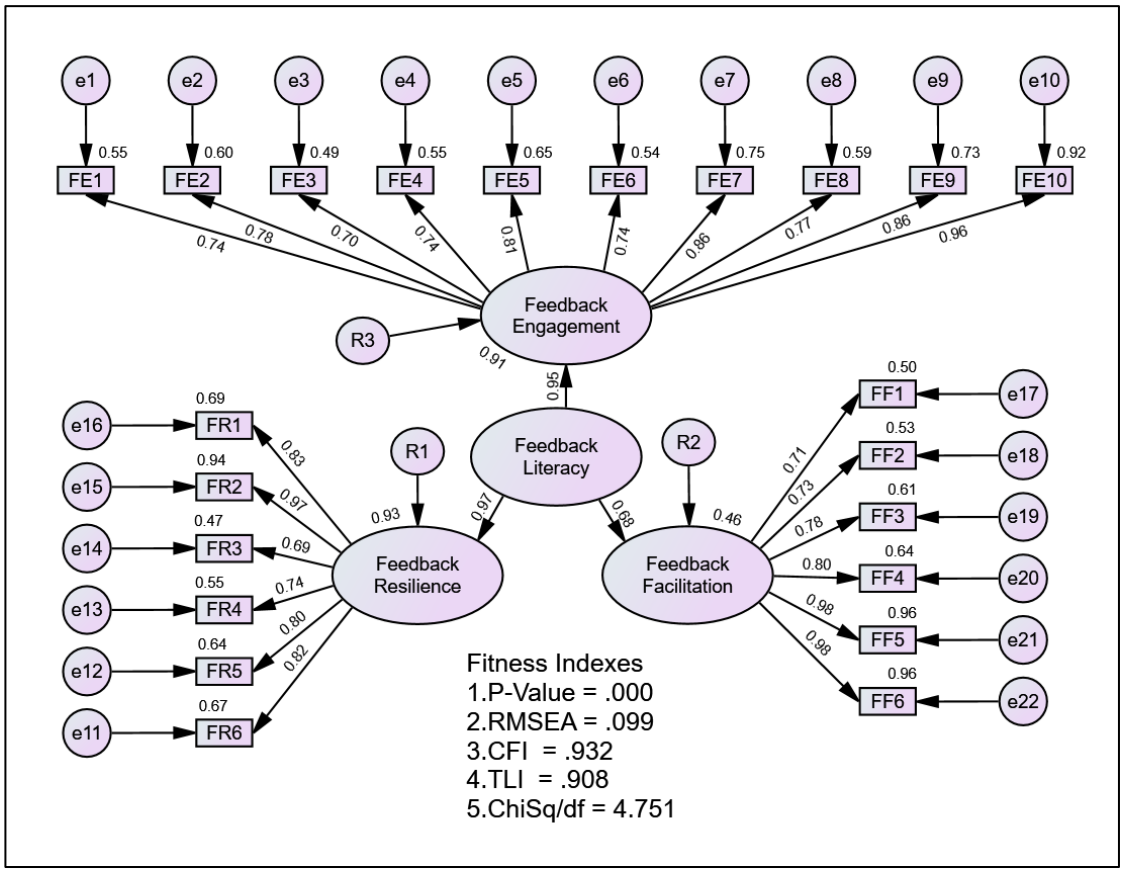


Figure 4.2 Final Measurement Model for Feedback Literacy

After re-estimation, the revised model (Figure 4.2) demonstrated substantial improvements across all fit categories. The RMSEA criterion reduced to 0.095, which falls within the acceptable range for absolute fit. The incremental fit indices also improved markedly, with CFI increasing to 0.937 and TLI to 0.915, both exceeding the recommended minimum of 0.90 (Hu & Bentler, 1999). Additionally, the ChiSq/df ratio dropped to 4.474, thus meeting the criterion for an acceptable model parsimony. All values met the recommended thresholds for model fit which confirms that the respecified model provided a satisfactory fit. Table 4.18 summarises the comparison between the initial and final models.

Table 4.18
Goodness-of-Fit Indices for Feedback Literacy Construct

Category	Index	Level of Acceptance	Initial Measurement Model	Remark	Final Measurement Model	Remark
Absolute Fit	Chi-Square	p-value >0.05 (Not applicable as sample size is more than 200)	.000	Not applicable	.000	Not applicable
	RMSEA	<0.10	0.137	Not Achieved	0.095	Achieved
Incremental Fit	CFI	>0.90	0.842	Not Achieved	0.937	Achieved
	TLI	>0.90	0.823	Not Achieved	0.915	Achieved
Parsimonious Fit	Chisq/df	<5.00	8.219	Not Achieved	4.474	Achieved

After establishing acceptable model fit, convergent validity was evaluated. This validity was confirmed as all factor loadings exceeded 0.50 (see Figure 4.2) and the average variance extracted (AVE) for each construct surpassed the threshold of 0.50 (Fornell & Larcker, 1981; Hair et al., 2010). Composite reliability (CR) was also assessed, with all values greater than 0.90, exceeding the minimum benchmark of 0.70 (Awang, 2015; Habsah et al., 2018). As shown in Table 4.19, FR achieved AVE=0.661 and CR=0.920, FE achieved AVE=0.632 and CR=0.945, and FF achieved AVE=0.701 and CR=0.933.

Table 4.19
AVE and CR for Feedback Literacy Construct

Construct/Subconstruct	Item Label	Factor Loading	AVE (above 0.5)	CR (above 0.7)
Feedback Literacy	FE	0.95	0.769	0.933
	FR	0.97		
	FF	0.68		
Feedback Resilience	FR1	0.83	0.661	0.920
	FR2	0.97		
	FR3	0.69		
	FR4	0.74		
	FR5	0.80		
	FR6	0.82		
Feedback Engagement	FE1	0.74	0.632	0.945
	FE2	0.78		
	FE3	0.70		
	FE4	0.74		
	FE5	0.81		
	FE6	0.74		
	FE7	0.86		
	FE8	0.77		
	FE9	0.86		
	FE10	0.96		
Feedback Facilitation	FF1	0.71	0.701	0.933
	FF2	0.73		
	FF3	0.78		
	FF4	0.80		
	FF5	0.98		
	FF6	0.98		

These findings provide evidence of convergent validity and composite reliability for feedback literacy. The construct was therefore retained for inclusion in the pooled-CFA. The next section reports the CFA results for grit.

4.3.2 Confirmatory Factor Analysis (CFA) for Grit

Confirmatory factor analysis (CFA) was conducted to validate the factor structure of the grit construct, which comprised two subconstructs: mastery through actions (MTA, seven items) and perseverance of effort (POE, five items), totalling 12 items. The initial model is presented in Figure 4.3.

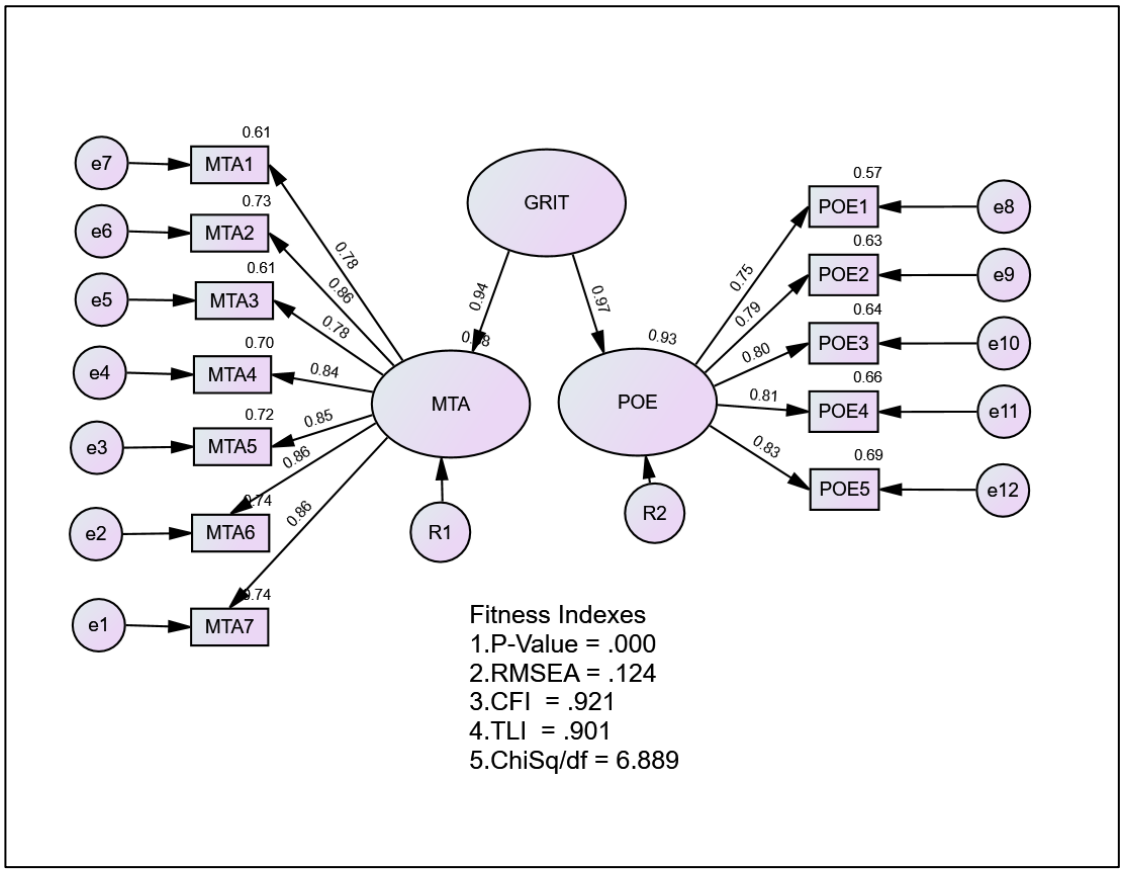


Figure 4.3 Initial Measurement Model for Grit

Figure 4.3 shows that all items recorded factor loadings above 0.60 which indicates that each item contributed meaningfully to its respective subconstruct. However, the overall model fit indices indicated that the initial model did not adequately represent the data. The Chi-square/df ratio was 6.889, RMSEA was 0.124, and both exceeded the recommended thresholds. Although incremental fit indices met the minimum criteria (CFI=0.921; TLI=0.901), the model failed to achieve acceptable absolute and parsimonious fit, as presented in Table 4.20. Due to these suboptimal fit indices, the model could not be considered to have achieved construct validity.

As the initial measurement model did not achieve satisfactory model fit, the model was respecified by examining the Modification Indices (MI) generated from the AMOS output. Following Hair et al. (2022) and Awang (2021), modification indices greater than 15 were examined to identify pairs of redundant items. Since all retained indicators demonstrated satisfactory factor loadings (≥ 0.60), no items were removed from the model. Instead, pairs of redundant items with the highest modification indices were specified as free parameter estimates by correlating their error terms, provided that the modifications were theoretically justifiable. The measurement model was then re-estimated as shown in Figure 4.4.

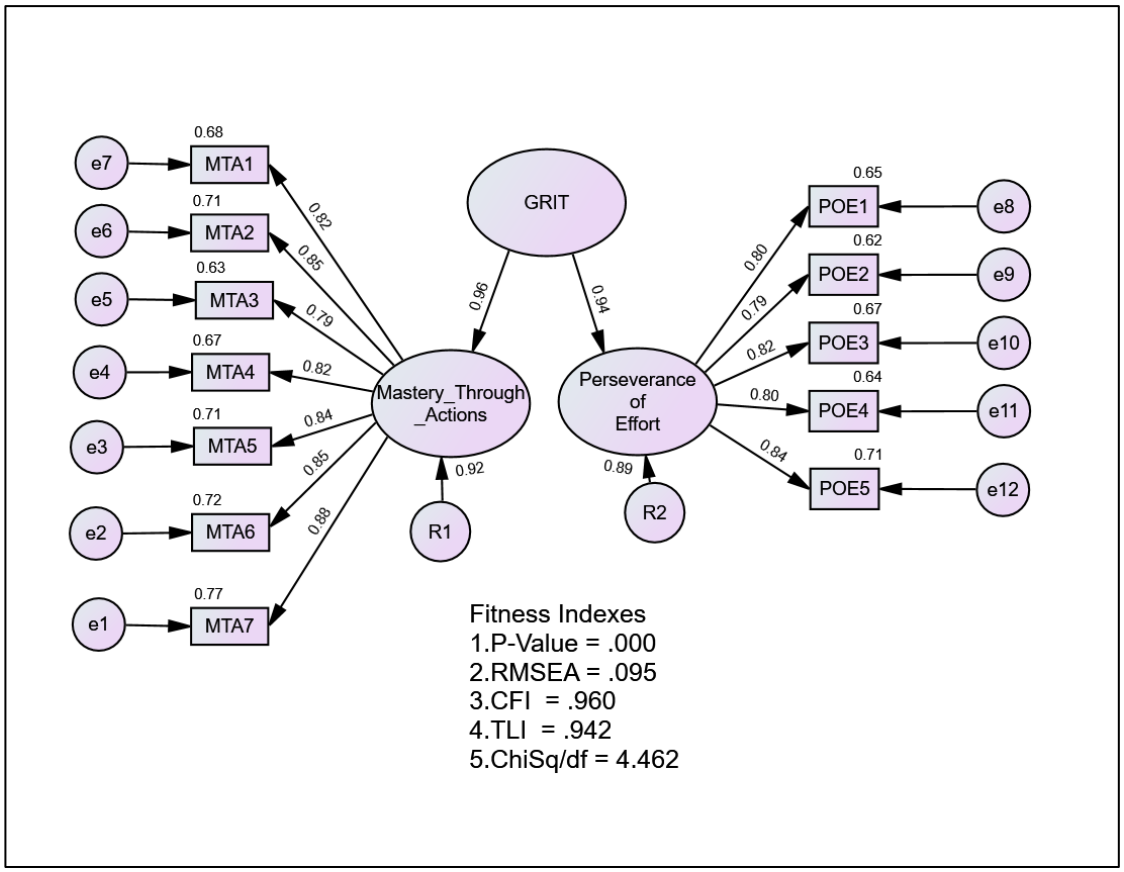


Figure 4.4 Final Measurement Model for Grit

After respecification, the final model retained all 12 items and the original two-factor structure. All factor loadings remained above 0.60, confirming unidimensionality. The overall model fit improved substantially, with Chi-square/df ratio decreased to 4.462, RMSEA value reduced to 0.095, CFI of 0.960 and a TLI of 0.942, all of which met the recommended thresholds (see Table 4.20). These results confirmed that the revised measurement model provided a satisfactory representation of grit.

Table 4.20
Goodness-of-Fit Indices for Grit Construct

Category	Index	Level of Acceptance	Initial Measurement Model	Remark	Final Measurement Model	Remark
Absolute Fit	Chi-Square	p-value >0.05	.000	Not applicable	.000	Not applicable as sample size is more than 200)
	RMSEA	<0.10	.124	Not Achieved	0.095	Achieved
Incremental Fit	CFI	>0.90	.921	Achieved	.959	Achieved
	TLI	>0.90	.901	Achieved	.943	Achieved
Parsimonious Fit	Chisq/df	<5.00	6.889	Not Achieved	4.462	Achieved

Convergent validity and internal consistency were also supported. As shown in Table 4.21, the grit construct achieved AVE=0.903 and CR=0.949. At the subconstruct level, MTA recoded AVE=0.699 and CR=0.942, while POE yielded AVE=0.655 and CR=0.905. All values exceeded the recommended cut-offs, confirming that the items converged well on their respective subconstructs and demonstrated strong reliability.

Table 4.21
AVE and CR for Grit Construct

Construct/Subconstruct	Item Label	Factor Loading	AVE (above 0.5)	CR (above 0.7)
Grit	MTA	0.96	0.903	0.949
	POE	0.94		
Mastery Through Actions	MTA1	0.63	0.699	0.942
	MTA2	0.76		
	MTA3	0.62		
	MTA4	0.67		
	MTA5	0.65		
	MTA6	0.71		
	MTA7	0.69		
Perseverance of Efforts	POE2	0.62	0.656	0.905
	POE3	0.67		
	POE4	0.66		
	POE5	0.72		

Overall, these results demonstrate that the grit construct met the requirements for model fit, convergent validity, and composite reliability. The construct was therefore retained for inclusion in the pooled-CFA. The next section reports the CFA results for intrinsic motivation.

4.3.3 Confirmatory Factor Analysis (CFA) for Intrinsic Motivation

A confirmatory factor analysis (CFA) was conducted to validate the factor structure of intrinsic motivation, which comprised two subconstructs. Intrinsic motivation consisted of two subconstructs: satisfaction-driven motivation (SDM, eight items) and value-recognition motivation (VRM, seven items), totalling 15 items. The initial measurement model is shown in Figure 4.5.

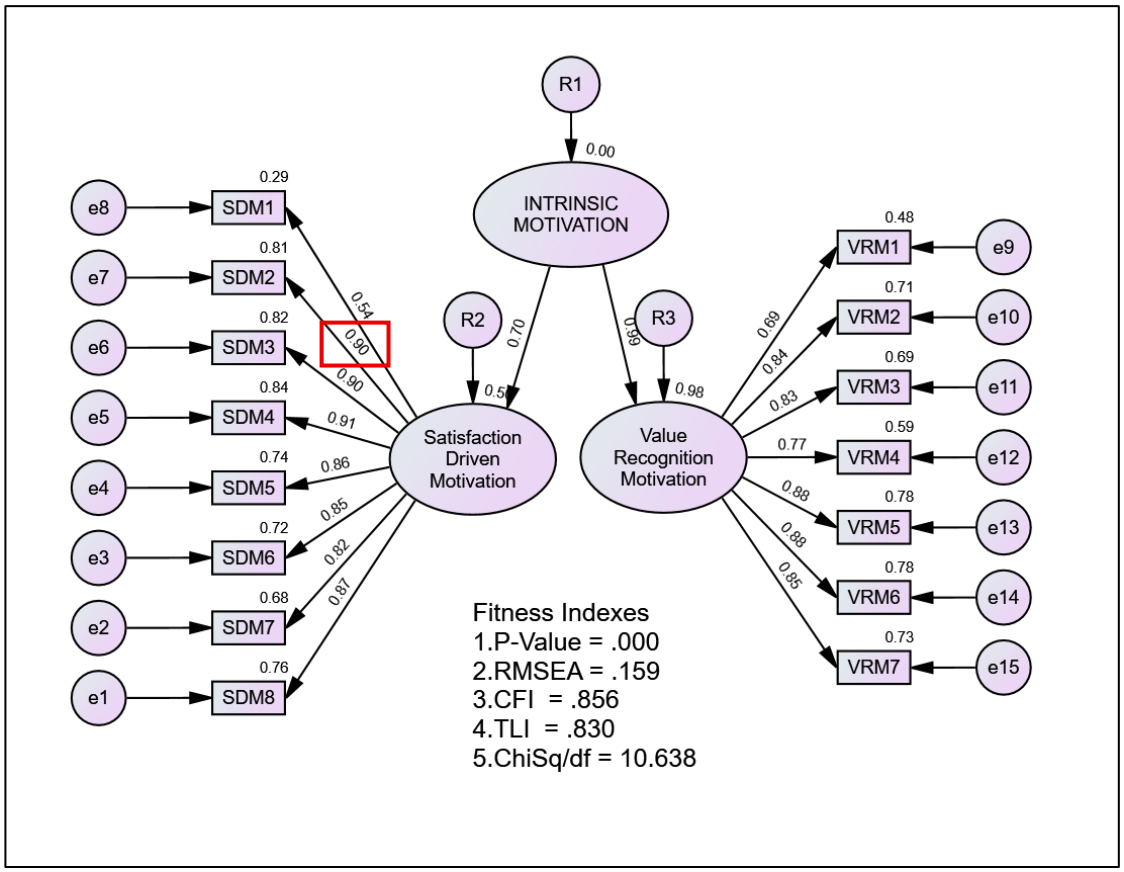


Figure 4.5 Initial Measurement Model for Intrinsic Motivation

In the initial model, all items were examined for their standardised factor loadings to establish unidimensionality. One item from SDM (SDM1) recorded a loading below 0.60, indicating weak representation of the subconstruct. In line with recommended practice, SDM1 was removed to improve the measurement quality. Also, the overall model indices indicated poor fit, with RMSEA=0.159, CFI=0.856, TLI=0.830, and ChiSq/df=10.638. Thus, the model was therefore respecified with 14 items only.

In the respecified model, as depicted in Figure 4.6, a Heywood case emerged in which item VRM1 produced a factor loading above 1.0. Such cases typically signal misspecification or estimation problem and, if retained, risk distorting the model. Thus, VRM1 was removed, and the model again re-estimated with 13 items in total.

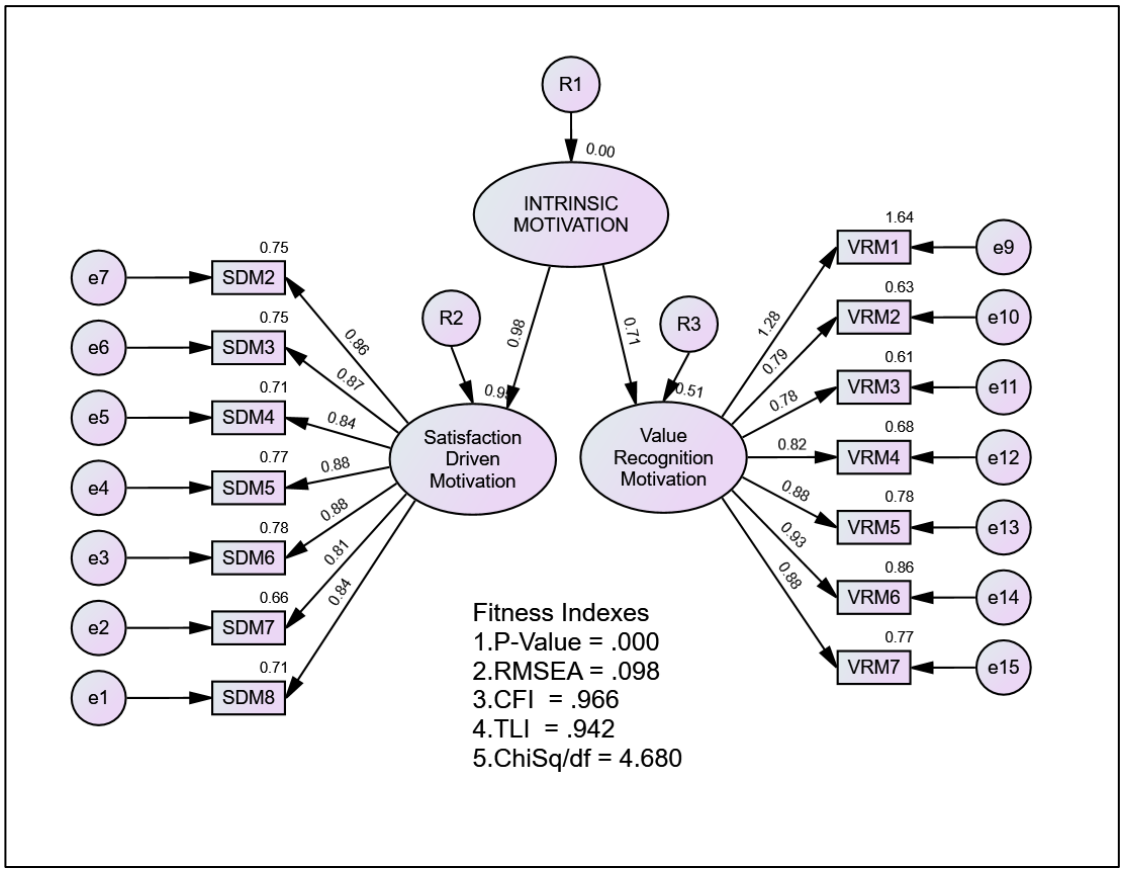


Figure 4.6 Second Measurement Model for Intrinsic Motivation

The revised model, as shown in Figure 4.7, demonstrated substantial improvements across all categories of fit indices. RMSEA decreased to 0.086, CFI increased to 0.976, TLI improved to 0.958, and ChiSq/df reduced to 3.822, all of which fell within acceptable thresholds (see Table 4.22). These results confirmed that the final measurement model for intrinsic motivation provided a satisfactory representation of the construct and achieved construct validity.

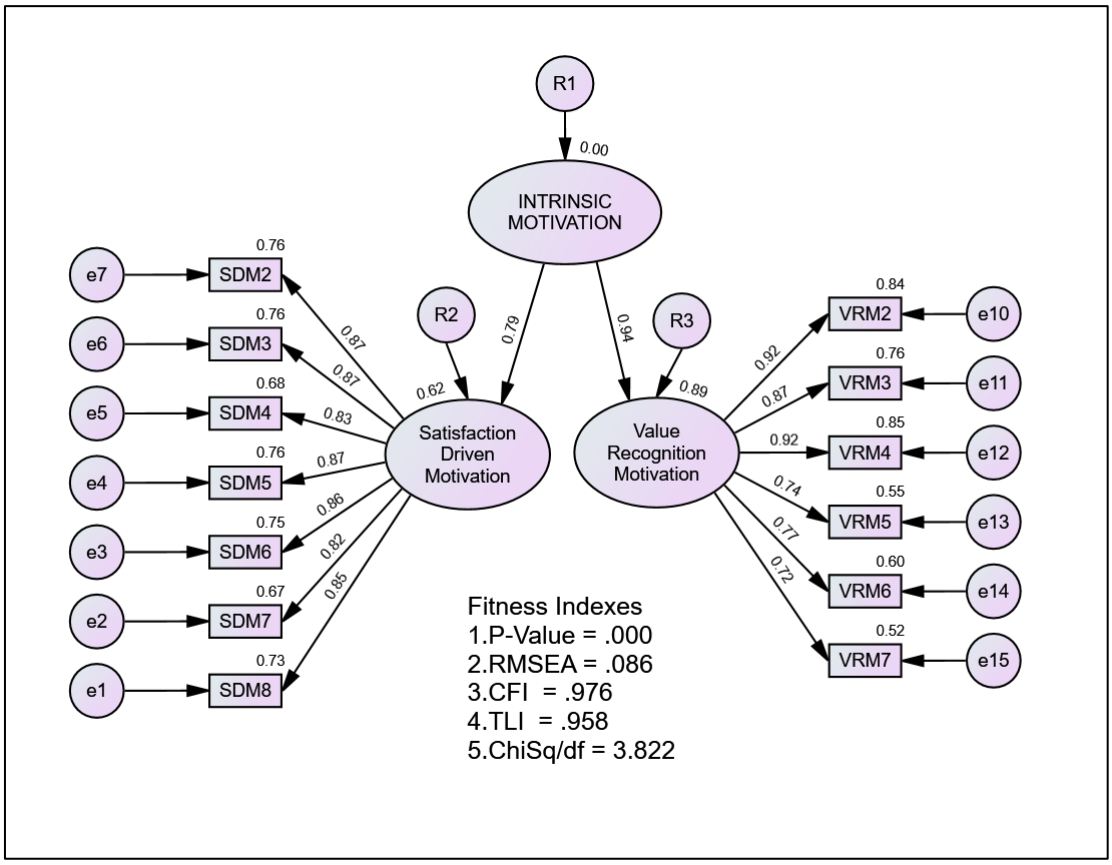


Figure 4.7 Final Measurement Model for Intrinsic Motivation

Table 4.22 summarises the comparison between the initial (Figure 4.5) and final models (Figure 4.7).

Table 4.22
Goodness-of-Fit Indices for Intrinsic Motivation Construct

Category	Index	Level of Acceptance	Initial Measurement Model	Remark	Final Measurement Model	Remark
Absolute Fit	Chi-Square	p-value >0.05 (Not applicable as sample size is more than 200)	.000	Not applicable	.000	Not applicable
	RMSEA	<0.10	0.159	Not Achieved	0.86	Achieved
Incremental Fit	CFI	>0.90	0.56	Not Achieved	0.976	Achieved
	TLI	>0.90	0.830	Not Achieved	0.958	Achieved
Parsimonious Fit	Chisq/df	<5.00	10.638	Not Achieved	3.822	Achieved

The final model was then evaluated for convergent validity and internal consistency. As shown in Table 4.23, all items reported loadings between 0.72 and 0.92, comfortably above recommended levels. At the subconstruct level, SDM recorded AVE=0.728 and CR=.0.949, while VRM recorded AVE=0.685 and CR=0.982. At the overall construct level, intrinsic motivation achieved AVE=0.754 and CR=0.859. These findings indicate strong item convergent and excellent reliability across both subconstructs.

Table 4.23
AVE and CR for Intrinsic Motivation Construct

Construct/Subconstruct	Item Label	Factor Loading	AVE (above 0.5)	CR (above 0.7)
Intrinsic Motivation	SDM	0.79	0.754	0.859
	VRM	0.94		
Satisfaction-Driven	SDM2	0.87	0.728	0.949
Motivation	SDM3	0.87		
	SDM4	0.83		
	SDM5	0.87		
	SDM6	0.86		
	SDM7	0.82		
	SDM8	0.85		
Value-Recognition	VRM2	0.92	0.685	0.982
Motivation	VRM3	0.87		
	VRM4	0.92		
	VRM5	0.74		
	VRM6	0.77		
	VRM7	0.72		

Taken together, these results affirm that intrinsic motivation is both valid and reliable. The construct was therefore retained for pooled-CFA, where its relationship with other constructs in the study could be assessed. The next section reports the CFA results for oral presentation competence.

4.3.4 Confirmatory Factor Analysis (CFA) for Oral Presentation Competence

A confirmatory factor analysis was conducted to validate the measurement model for oral presentation competence, the endogenous construct in this study. The construct was conceptualised as comprising three first-order subconstructs: delivery (DEL, six items), content mastery (CMT, seven items), and audience engagement (AUD, eight items), totalling 21 items. The measurement model is shown in Figure 4.8.

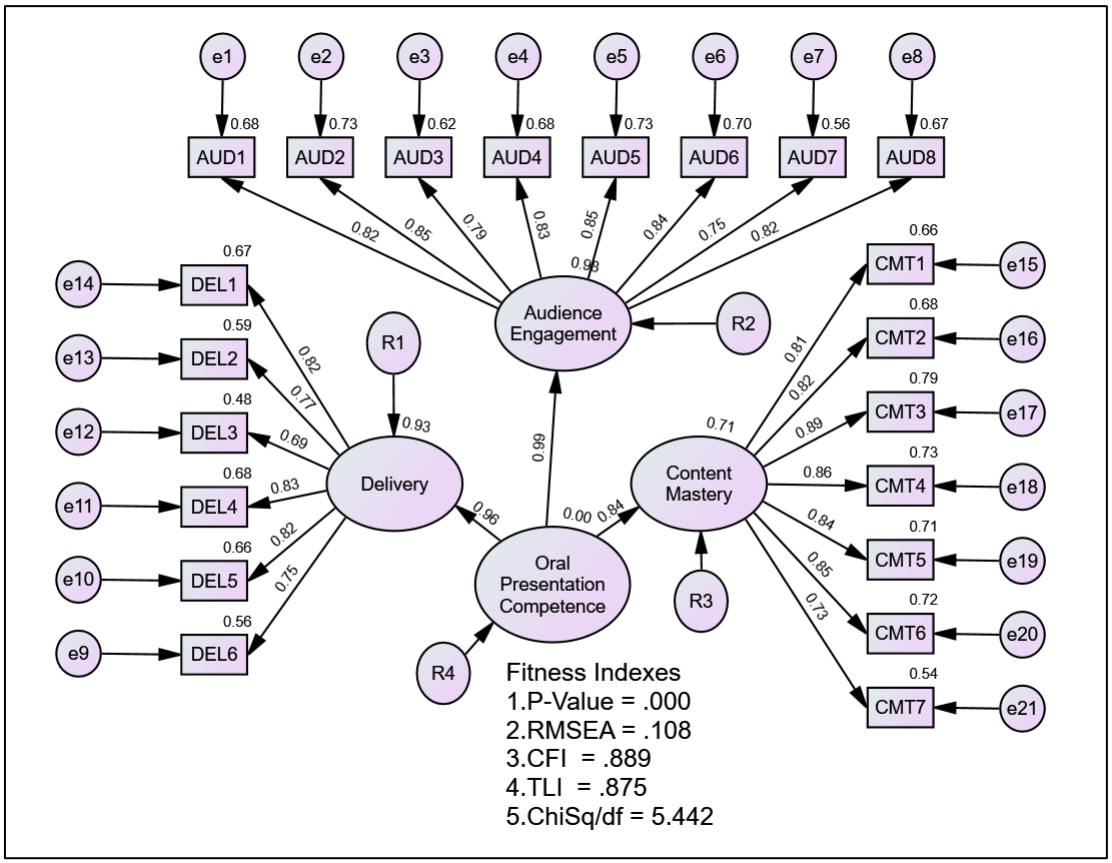


Figure 4.8 First Measurement Model for Oral Presentation Competence

The measurement model was first assessed for unidimensionality. All 21 items achieved factor loadings >0.60, confirming their contributions to their respective subconstructs. However, the initial model did not achieve acceptable fit. RMSEA=0.108 exceeded the maximum threshold of 0.10, while CFI=0.889 and TLI=0.875 fell below the 0.90 benchmark. The ChiSq/df was 5.442, slightly above the recommended value of <5.0. These results suggested that the model required respecification.

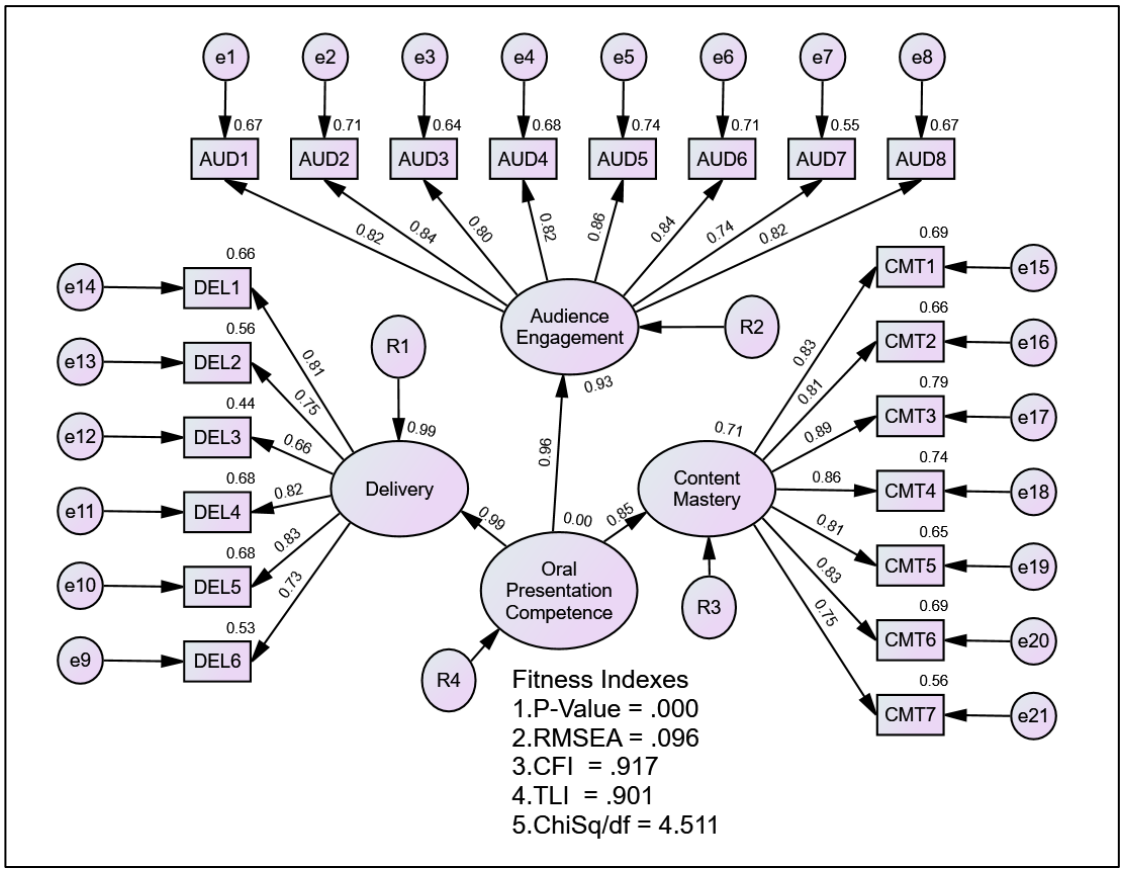


Figure 4.9 Final Measurement Model for Oral Presentation Competence

After model refinement, the final measurement model (Figure 4.9) showed marked improvements across all indices. RMSEA decreased to 0.096, CFI increased to 0.917, TLI improved to 0.901, and χ^2/df dropped to 4.511. All values fell within acceptable thresholds (see Table 4.24). These results confirmed that the revised measurement model provided an adequate representation of oral presentation competence and established construct validity.

Table 4.24
Goodness-of-Fit Indices for Oral Presentation Competence Construct

Category	Index	Level of Acceptance	Initial Measurement Model	Remark	Final Measurement Model	Remark
Absolute Fit	Chi-Square	p-value >0.05 (Not applicable as sample size is more than 200)	.000	Not applicable	.000	Not applicable
	RMSEA	<0.10	0.108	Not Achieved	0.096	Achieved
Incremental Fit	CFI	>0.90	0.889	Not Achieved	0.917	Achieved
	TLI	>0.90	0.875	Not Achieved	0.901	Achieved
Parsimonious Fit	Chisq/df	<5.00	5.442	Not Achieved	4.511	Achieved

The construct was further assessed for convergent validity and reliability. As reported in Table 4.25, the higher-order construct achieved AVE=0.875 and CR= 0.933, demonstrating strong convergence and internal consistency. At the subconstruct level, DEL recorded AVE=0.591 and CR=0.896; CMT reported AVE= 0.683 and CR=0.938; and AUD achieved AVE=0.669 and CR=0.942. All values exceeded recommended benchmarks (Table 4.17), confirming that each dimension was measured consistently and meaningfully.

Table 4.25
AVE and CR for Oral Presentation Competence Construct

Construct/Subconstruct	Item Label	Factor Loading	AVE (above 0.5)	CR (above 0.7)
Oral Presentation Competence	DEL	0.99	0.875	0.933
	CMT	0.85		
	AUD	0.96		
Delivery	DEL1	0.81	0.591	0.896
	DEL2	0.75		
	DEL3	0.66		
	DEL4	0.82		
	DEL5	0.83		
	DEL6	0.73		
Content Mastery	CMT1	0.83	0.683	0.938
	CMT2	0.81		
	CMT3	0.89		
	CMT4	0.86		
	CMT5	0.81		
	CMT6	0.83		
	CMT7	0.75		
Audience Engagement	AUD1	0.82	0.669	0.942
	AUD2	0.84		
	AUD3	0.80		
	AUD4	0.82		
	AUD5	0.86		
	AUD6	0.84		
	AUD7	0.74		
	AUD8	0.82		

Taken together, these results indicate that the items within each dimension reliably represented their latent constructs and that the overall measurement model of oral presentation competence demonstrated robust validity and reliability. The construct was therefore retained for inclusion in the pooled CFA and subsequent structural equation modelling analyses.

4.3.5 Pooled-Confirmatory Factor Analysis (CFA)

A pooled confirmatory factor analysis (CFA) was conducted to assess the distinctiveness and overall model fit of the latent constructs within a unified measurement model. The pooled model comprises five constructs: perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. Among these, perceived autonomy support serves as the exogenous construct while oral presentation competence functions as the endogenous construct. The schematic representation of the pooled model is presented in Figure 4.10.

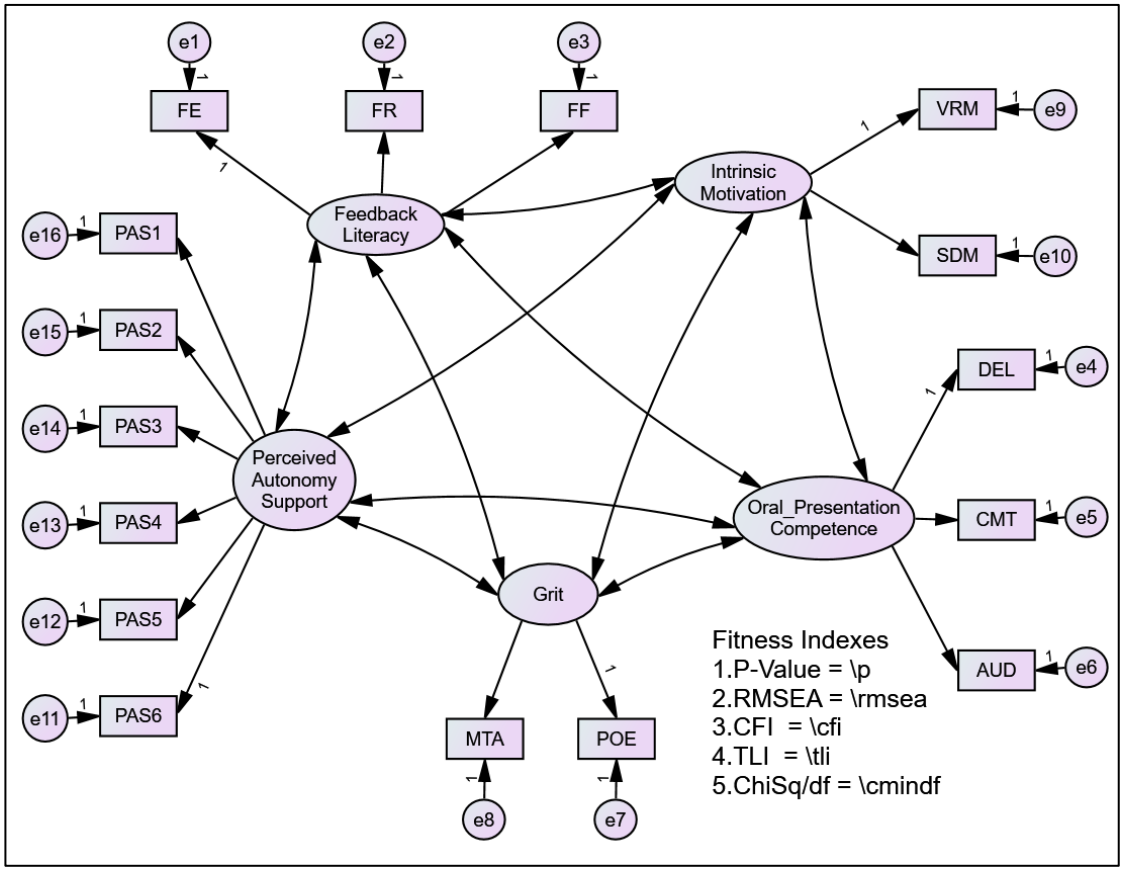


Figure 4.10 Pooled-CFA Measurement Model Schematic Diagram

Prior to conducting the pooled CFA, each second-order construct was individually examined and validated through separate CFA procedures. In the pooled model, these constructs were represented by their first-order subconstructs to reduce complexity and facilitate more efficient estimation (Awang, 2015). This approach also enables the simultaneous assessment of all latent constructs within a single

measurement model, allowing for a more rigorous evaluation of construct distinctiveness (Mustafa et al., 2024).

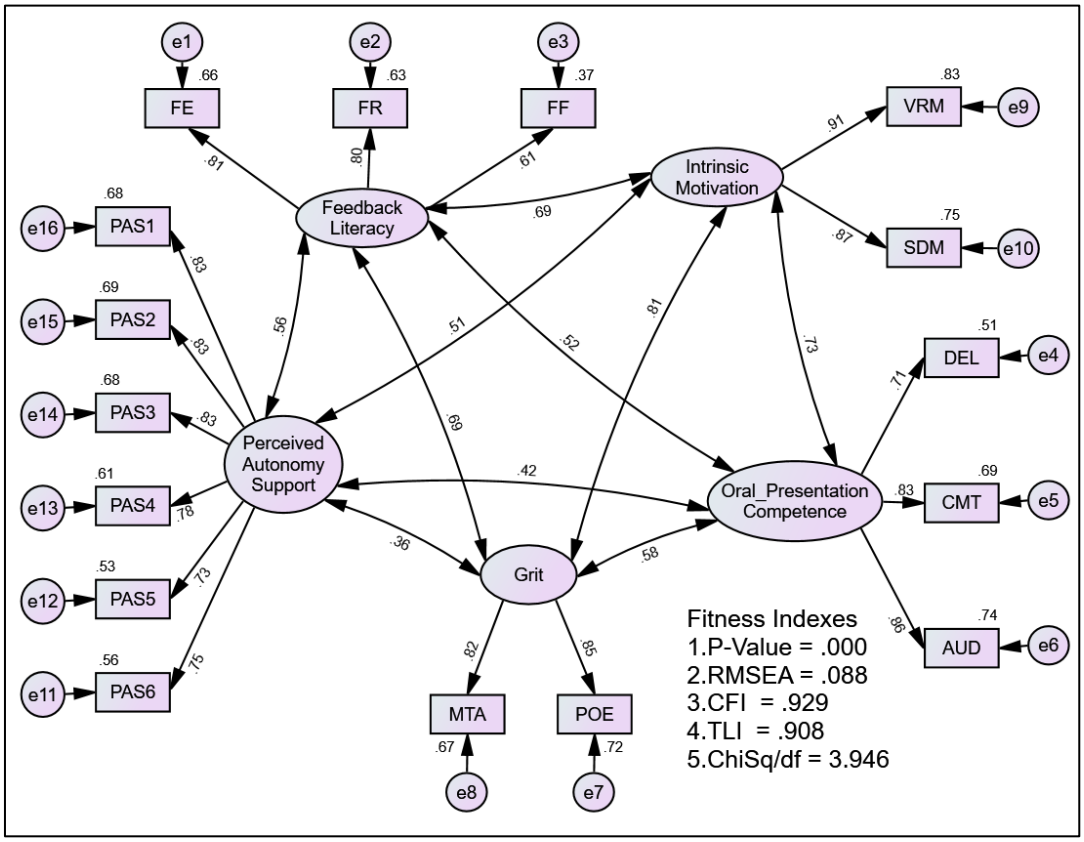


Figure 4.11 Pooled-CFA Measurement Model and Indices

All factor loadings exceeded 0.60, ranging from 0.61 (feedback facilitation) to 0.91 (value-recognition motivation). This demonstrates that the observed items contributed meaningfully to their respective latent constructs, thereby establishing unidimensionality and construct validity.

The results, presented in Figure 4.11 and summarised in Table 4.26, demonstrate that the pooled model achieved a satisfactory fit across all key indices. The RMSEA value was 0.088, falling within the acceptable range of <0.10. Both the Comparative Fit Index (CFI=0.929) and Tucker-Lewis Index (TLI=0.908) exceeded the recommended threshold of 0.90 (Hu & Bentler, 1999). Additionally, the Chi-square/df ratio was 3.946, meeting the criterion for a parsimonious fit (Awang, 2015; Hair et al., 2010). Collectively, these indices confirm that the measurement model adequately represented the data.

Table 4.26
Goodness-of-Fit for Pooled-CFA

Category	Index	Level of Acceptance	Pooled-CFA Measurement Model	Remark
Absolute Fit	Chi-Square	p-value >0.05 (Not applicable as sample size is more than 200)	.000	Not applicable
	RMSEA	<0.10	0.088	Achieved
Incremental Fit	CFI	>0.90	0.929	Achieved
	TLI	>0.90	0.908	Achieved
Parsimonious Fit	Chisq/df	<5.00	3.946	Achieved

Convergent validity and reliability were also supported. As shown in Table 4.27, all constructs achieved AVE values above 0.50 (ranging from 0.613 to 0.793) and CR values above 0.80 (ranging from 0.822 to 0.933). These results confirm that the constructs explained substantial variance in their indicators and exhibited strong internal consistency (Hair et al., 2010; Noor et al., 2015).

Table 4.27
AVE and CR of Pooled-CFA

Construct	Item/Subconstruct	Factor Loading	AVE (above 0.5)	CR (above 0.7)
Perceived Autonomy Support	PAS1	0.83	0.628	0.910
	PAS2	0.83		
	PAS3	0.83		
	PAS4	0.78		
	PAS5	0.73		
	PAS6	0.75		
Feedback Literacy	Feedback Engagement (FE)	0.81	0.613	0.822
	Feedback Resilience (FR)	0.90		
	Feedback Facilitation (FF)	0.61		
Grit	Mastery Through Actions (MTA)	0.82	0.697	0.822
	Perseverance of Efforts (POE)	0.85		
Intrinsic Motivation	Value-Recognition Motivation (VRM)	0.91	0.793	0.884
	Satisfaction-Driven Motivation (SDM)	0.87		
Oral Presentation Competence	Delivery (DEL)	0.81	0.695	0.872
	Content Mastery (CMT)	0.83		
	Audience Engagement (AUD)	0.86		

In sum, the pooled CFA demonstrated satisfactory model fit, unidimensionality, convergent validity, and composite reliability. With these measurement properties established, the next section examines the discriminant validity of the pooled measurement model.

4.3.5.1 Discriminant Validity

Discriminant validity was assessed to ensure that each latent construct in the model is empirically distinct. This form of validity confirms that the indicators of a given construct measure only that construct, and not others. Redundancy or

multicollinearity between constructs can compromise model interpretability and inflate structural path estimates (Awang, 2015; Fornell & Larcker, 1981; Kim, 2019; Ullah et al., 2019).

The Fornell-Larcker criterion was employed in this study, which requires the square root of the average variance extracted (AVE) of each construct to exceed its correlations with all other constructs in the model. Table 4.28 presents the discriminant validity index summary where the correlation values are retrieved from Figure 4.11 and the AVE values are extracted from Table 4.27. Discriminant validity is achieved when the diagonal values (square root AVEs, in bold) are greater than the corresponding off-diagonal correlations (Anuar et al., 2023; Awang, 2015; Baharum et al., 2023; Habsah et al., 2018).

Table 4.28
Discriminant Validity Index Summary for All Constructs

Construct	Perceived Autonomy Support	Feedback literacy	Grit	Intrinsic Motivation	Oral Presentation Competence
Perceived Autonomy Support	**0.79**				
Feedback Literacy	0.56	**0.78**			
Grit	0.36	0.69	**0.83**		
Intrinsic Motivation	0.51	0.69	0.81	**.89**	
Oral Presentation Competence	0.42	0.52	0.58	0.73	**.83**

As shown in Table 4.28, all constructs satisfied the Fornell–Larcker criterion. For perceived autonomy support, the square root of AVE (0.79) was greater than its highest inter-construct correlation (0.56 with feedback literacy). For feedback literacy, the square root of AVE (0.78) exceeded its highest correlation (0.69 with grit and intrinsic motivation). For grit, the square root of AVE (0.83) was higher than its strongest correlation (0.81 with intrinsic motivation). For intrinsic motivation, the square root of AVE (0.89) exceeded all correlations, including its highest with grit

(0.81). Finally, oral presentation competence demonstrated a square root of AVE of 0.83, which was higher than its strongest correlation (0.73 with intrinsic motivation).

The lowest inter-construct correlations were observed between perceived autonomy support and grit (r=0.36), and between perceived autonomy support and oral presentation competence (r= 0.42), indicating clear separation between these constructs. The highest inter-correlation was between grit and intrinsic motivation (r=0.81), but this still fell below their respective square root AVE values.

These results confirm that all five constructs are empirically distinct and that each construct shares more variance with its own indicators than with other constructs. This provides strong evidence of discriminant validity for the measurement model.

4.3.5.2 Normality Assessment

Before proceeding to the structural model estimation, the distributional properties of the data were assessed to confirm that the assumptions required for parametric statistical analysis were met. As structural equation modelling (SEM) with maximum likelihood estimation (MLE) assumes multivariate normality, both univariate and multivariate normality were evaluated (Awang, 2015; Byrne, 2009, 2010; Habsah et al., 2018; Hair et al., 2010). Therefore, both univariate and multivariate normality were examined for the pooled measurement model, and the results are presented in Table 4.29.

Table 4.29
Normality Assessment for Constructs

Construct	Variable	Min	Max	Skew	C.R.	Kurtosis	C.R.
Perceived Autonomy Support	**PAS1**	3.000	10.000	-.460	-3.672	.030	.118
	PAS2	3.000	10.000	-.742	-5.929	.451	1.800
	PAS3	3.000	10.000	-.514	-4.107	.122	.489
	PAS4	4.000	10.000	-.584	-4.662	.326	1.301
	PAS5	3.000	10.000	-.556	-4.442	-.007	-.028
	PAS6	2.000	10.000	-.775	-6.196	1.004	4.010
Feedback Literacy	**FF**	4.000	10.000	-.379	-3.029	-.671	-2.682
	FR	1.000	10.000	-.937	-7.489	2.161	8.632
	FE	3.000	10.000	-.880	-7.030	1.238	4.946
Grit	**MTA**	4.000	10.000	-.696	-5.562	.480	1.919
	POE	2.000	10.000	-.694	-5.543	.701	2.801

Oral Presentation Competence	**SDM**	4.000	10.000	-.728	-5.820	.321	1.281
	VRM	4.000	10.000	-.608	-4.860	.271	1.084
	AUD	4.000	10.000	-.996	-7.957	1.303	5.205
	CMT	4.000	10.000	-.736	-5.883	.506	2.023
	DEL	4.000	10.000	-.472	-3.772	-.241	-.961
Multivariate						150.301	61.280

Univariate normality was assessed using skewness and kurtosis statistics. According to Awang (2015), the distribution of an item can be considered approximately normal if its skewness value lies within the range of -1.5 to +1.5. As reported in Table 4.29, all items in the measurement model satisfied this criterion. The skewness values ranged from -0.379 to -0.996, indicating symmetric distributions across all constructs. For example, perceived autonomy support items (PAS1–PAS6) reported skewness values between -0.460 and -0.775, which were well within the acceptable range. Similarly, content mastery (CMT) and value-recognition motivation (VRM) recorded skewness values of -0.736 and -0.608, respectively, further affirming univariate normality.

Kurtosis values were also examined, as excessive kurtosis may indicate the presence of outliers or heavy tails in the data. In this study, kurtosis values ranged from -0.671 (feedback facilitation) to 2.161 (feedback resilience), with no item exceeding the threshold of ±7.00 suggested by West et al. (1995). These findings confirm that the data distribution does not exhibit problematic peaks or flatness.

Multivariate normality was then assessed using Mardia's coefficient to assess the normality assumption (Ajjaj et al., 2022). The results indicated a multivariate kurtosis value of 150.301 with a critical ratio (C.R.) of 61.280, which exceeds the conservative cut-off of 5.0 (Gao et al., 2008), While this suggests a departure from strict multivariate normality, it is important to note that such inflation is typical in large samples. Several scholars (Byrne, 2010; Cain et al., 2017; Kline, 2010, 2016) argue that SEM estimation using MLE is generally robust against moderate violations of multivariate normality, particularly when sample sizes exceed 200, as is the case in this study. In line with Stevens (2009), the interpretation of univariate skewness and kurtosis values provides a more reliable indication of the distributional properties in large datasets.

In conclusion, the results of both univariate and multivariate assessments suggest that the dataset sufficiently adheres to the assumption of normality. These results provide empirical support for the appropriateness of using parametric methods

for the model estimation. As the assumptions of normality have been satisfied, the study proceeds to test the structural model and evaluate the hypothesised relationships among constructs in the next section.

4.4 Structural Equation Modelling (SEM)

The next stage of the data analysis was to test the structural model using structural equation modeling (SEM). SEM enables the simultaneous evaluation of relationships among latent constructs while accounting for measurement error, making it particularly suitable for this study (Awang, 2015; Habsah et al., 2018; Hair et al., 2010; Newman et al., 2010; Peugh & Feldon, 2020).

The structural model in this study, which is referred to as COMPASS Model (Competence in Oral Presentation through Motivation, Autonomy Support, Feedback Literacy, and Grit), comprises five latent constructs: perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. This arrangement was guided by Self-Determination Theory (Ryan & Deci, 2000) and supported by previous empirical findings, which conceptualise perceived autonomy support as the environmental antecedent that facilitates students' engagement with feedback, perseverance, and intrinsic motivation. Oral presentation competence was specified as the sole endogenous construct because it represents the final outcome of these interconnected psychological processes and is the primary dependent variable of the present study.

Figure 4.12 illustrates the structural model, with constructs arranged according to causal flow using the single-headed arrow: exogenous variables on the left, mediators are placed in the centre, and the endogenous construct on the right (Guney, 2009). Two key assessments were undertaken to assess the structural model. First, the model fit indices of the structural model were examined to ensure that the structural model adequately fits the data. Second, individual path estimates were evaluated to determine whether the hypothesised relationships are statistically supported (i.e. significant at $p<.05$ or $p<.001$). The following sections present the results for (i) model fit assessment (Figure 4.12), (ii) hypothesis testing for the proposed paths, and (iii) mediation testing for grit, feedback literacy, and intrinsic motivation.

4.4.1 Structural Model of the Study

Structural equation modeling (SEM) was conducted to examine the hypothesised relationships among the five latent constructs: perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. This stage involved evaluating both the overall model fit and the structural paths in the to determine whether the proposed model adequately represented the theorised relationships.

Model fit was first assessed using three categories of indices: absolute fit (RMSEA), incremental fit (CFI and TLI), and parsimonious fit (χ^2/df). As shown in Figure 4.12 and Table 4.30, the structural model achieved acceptable fit across all criteria: RMSEA=0.089 (<0.10), CFI=0.924 (> 0.90), TLI=0.905 (>0.90), and ChiSq/df = 4.048 (<5.00). These results confirm that the structural model provides a reasonable fit to the data and can proceed for hypothesis testing.

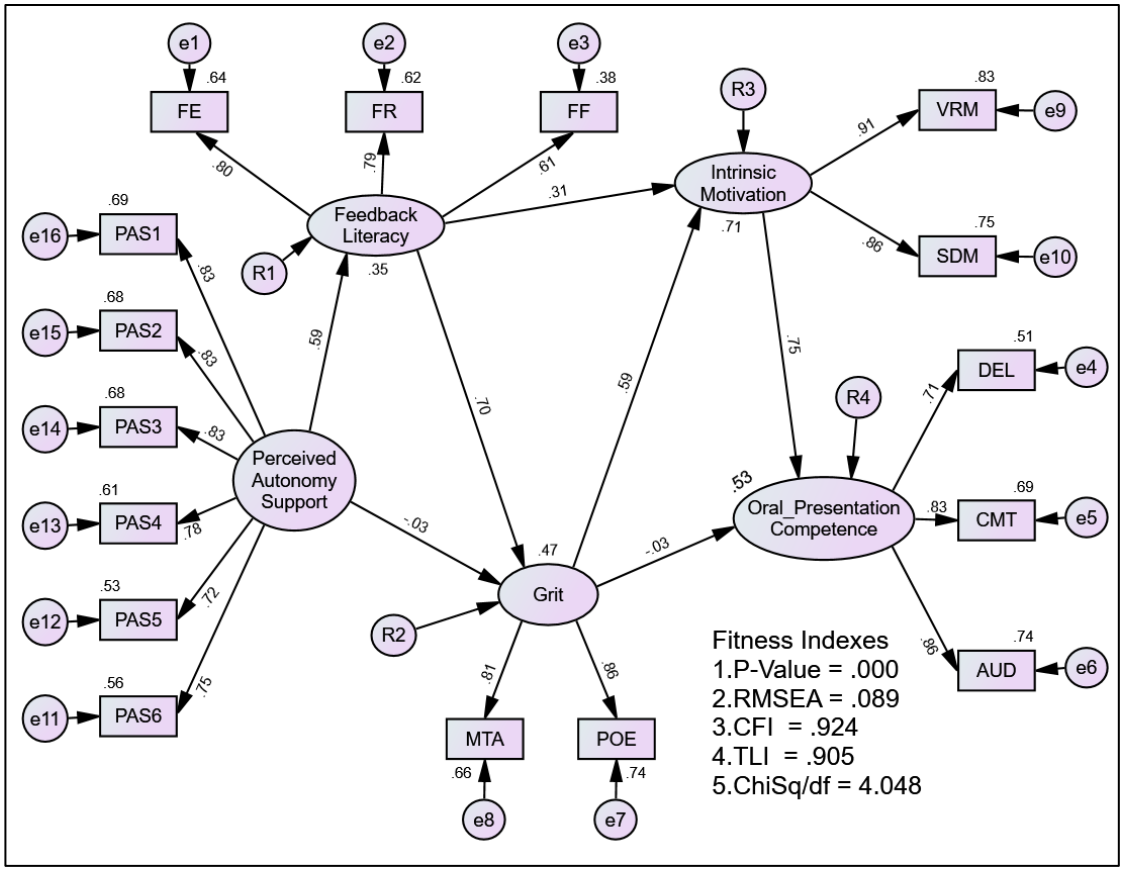


Figure 4.12 Standardised Path Coefficients between Constructs in the Structural Model

Table 4.30
Model Fit Indexes for the Structural Model

Index	Level of Acceptance	Structural Model	Remarks
Chi-Square	p-value>0.05	0.000	Not applicable sample size is more than 200.
RMSEA	<0.10	0.089	Achieved
TLI	>0.90	0.905	Achieved
CFI	>0.90	0.924	Achieved
Chi-square/df	<5.00	4.048	Achieved

Table 4.31 summarises the R^2 values for each endogenous construct. Feedback literacy recorded an R^2 of 0.35, suggesting that perceived autonomy support explained approximately 35% of its variance. Grit recorded an R^2 of 0.47, explained jointly by perceived autonomy support and feedback literacy. Intrinsic motivation demonstrated the strongest predictive capacity, with an R^2 of 0.71, explained by perceived autonomy support, feedback literacy, and grit. Finally, oral presentation competence achieved an R^2 of 0.53, indicating that the four factors collectively explained more than half of its variance.

Table 4.31
The R^2 and Implications

Construct	R^2	Conclusion
Feedback Literacy	0.35	Perceived Autonomy Support contributes about 35 percent towards Feedback Literacy.
Grit	0.47	Perceived Autonomy Support and Feedback Literacy contribute about 47 percent towards Grit.
Intrinsic Motivation	0.71	Perceived Autonomy Support, Feedback Literacy and Grit contribute about 71 percent towards Intrinsic Motivation.
Oral Presentation Competence	0.53	Perceived Autonomy Support, Feedback Literacy, Grit and Intrinsic Motivation contribute about 53 percent towards Oral Presentation Competence.

These findings suggest that the structural model possesses substantial explanatory power. Following Hair et al. (2010) and Cohen (1988), R^2 values of 0.35, 0.47, 0.53, and 0.71 can be interpreted as ranging from moderate to strong, thereby supporting the model's robustness. The results validate the conceptual framework

(COMPASS model) and confirm the importance of the selected factors in explaining students' oral presentation competence. The next section presents the hypothesis testing results based on the structural path estimates.

4.4.2 Hypothesis Testing

After establishing acceptable model fit, the next stage of the analysis tested the hypothesised effects in the structural model using SEM in AMOS 21.0. The analysis evaluated the standardised regression coefficients (β), critical ratios (C.R.), and significance levels for the hypothesised paths. Figure 4.13 illustrates the regression path coefficients, and the detailed results are presented across three tables: Table 4.32 (effect sizes), Table 4.33 (full regression outputs), and Table 4.34 (hypothesis testing decisions)

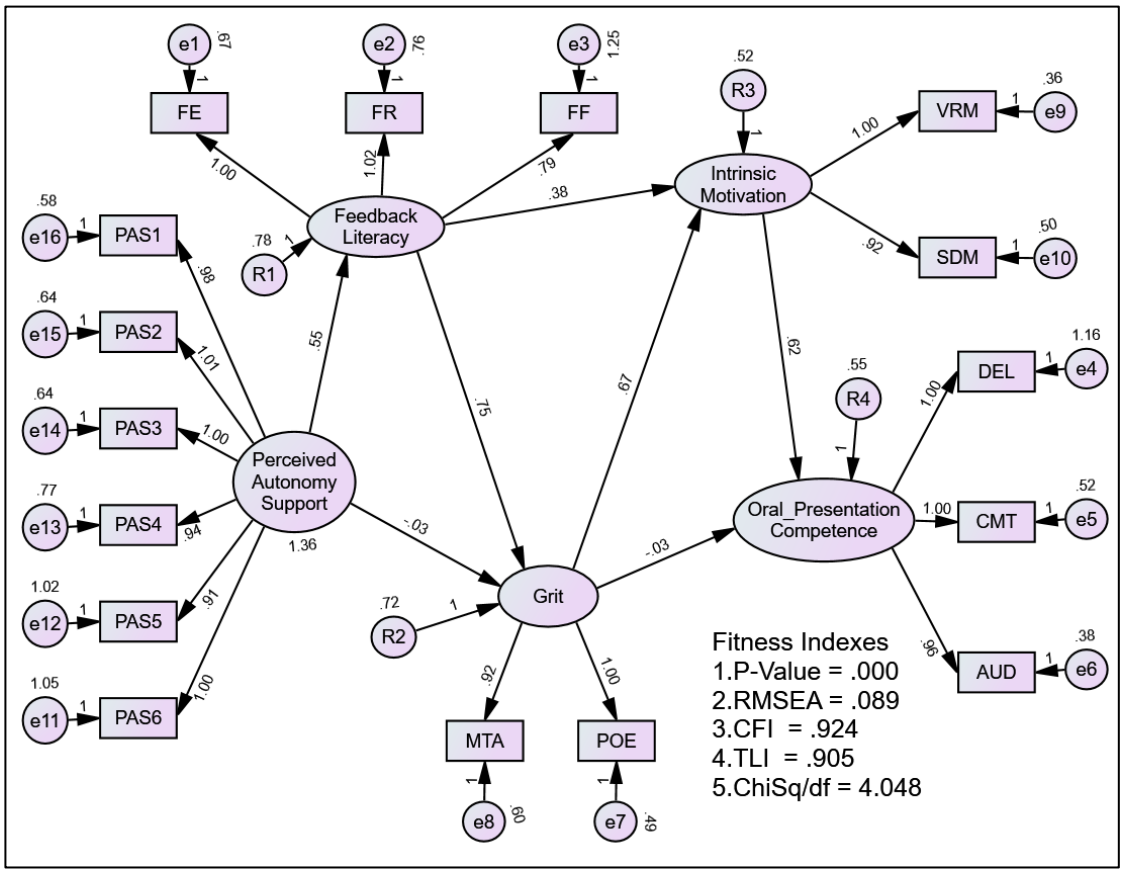


Figure 4.13 Regression Path Coefficients among Constructs

The regression path coefficients between the latent constructs, extracted from the structural model, are summarised in Table 4.32. These coefficients represent the magnitude and direction of the hypothesised sequential effects. A higher beta (β) value indicates a stronger relationship between the independent and dependent constructs, whereas the significance levels determine whether these relationships are statistically supported.

Table 4.32
Regression Path Coefficients of Constructs

No	Construct		Construct	Beta	Explanation
H1	Perceived Autonomy Support	<---	Feedback Literacy	**0.55**	When Perceived Autonomy Support increases by one unit, Feedback Literacy increases by 0.55.
H2	Feedback Literacy	<---	Grit	**0.75**	When Feedback Literacy increases by one unit, Grit increases by 0.75.
H3	Grit	<---	Intrinsic Motivation	**0.67**	When Grit increases by one unit, Intrinsic Motivation increases by 0.67.
H4	Intrinsic Motivation	<---	Oral Presentation Competence	**0.62**	When Intrinsic Motivation increases by one unit, Oral Presentation Competence increases by 0.62

As presented in Table 4.32, perceived autonomy support (PAS) had a positive effect on feedback literacy (β=0.55), which reflects a moderate influence. Feedback literacy exerted a strong effect on grit (β=0.73), indicating that students' ability to engage with feedback plays a substantial role in sustaining their perseverance. Grit in turn influenced intrinsic motivation with a strong effect (β=0.67), showing that persistence contributes meaningfully to students' internal drive. Finally, intrinsic motivation had a moderately strong effect on oral presentation competence (β=0.62), suggesting that intrinsic factors are important in enhancing competence, though not as dominant as the earlier psychological links in the model.

Table 4.33 reports the full regression outputs, including S.E., C.R., and p-values, which statistically confirm the significance of each path. In SEM, a path is considered

significant if its critical ratio (C.R.) exceeds 1.96, which corresponds to $p<0.05$ in the standard normal distribution (Byrne, 2010; Hair et al., 2010). In this study, all hypothesised paths recorded C.R. values well above this threshold, ranging from 6.852 to 9.507, with significance levels at $p<.001$. These results indicate robust support for the hypothesised effects. The strength of the paths also aligns with SEM conventions, where coefficients above 0.50 are typically regarded as moderate to strong (Hair et al., 2010).

Table 4.33
Regression Path Coefficient and Significance

No	Construct		Construct	Estimate	S.E.	C.R.	P	Result
H1	Feedback Literacy	<---	Perceived Autonomy Support	.554	.058	9.507	***	Significant
H2	Grit	<---	Feedback Literacy	.753	.087	8.696	***	Significant
H3	Intrinsic Motivation	<---	Grit	.673	.080	8.381	***	Significant
H4	Oral Presentation Competence	<---	Intrinsic Motivation	.618	.090	6.852	***	Significant

Table 4.34 then summarises the hypothesis testing decisions. All four hypotheses (H1–H4) were supported. These results provide empirical validation for the COMPASS model and confirm the sequential influence of autonomy support, feedback literacy, grit, and intrinsic motivation on students' oral presentation competence.

Table 4.34
Sequential Hypothesis Testing

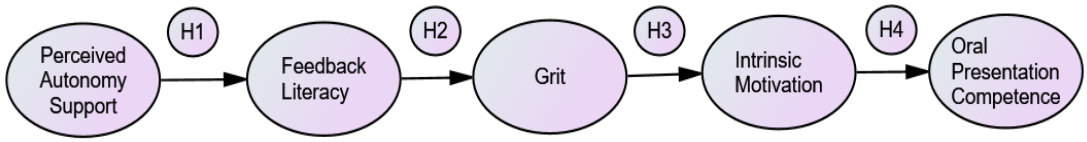
	Hypothesis Statement	P value	Results
H_1	Perceived autonomy support has a positive and significant effect on feedback literacy.	<0.001	Hypothesis is supported
H_2	Feedback literacy has a positive and significant effect on grit.	<0.001	Hypothesis is supported
H_3	Grit has a positive and significant effect on intrinsic motivation.	<0.001	Hypothesis is supported
H_4	Intrinsic motivation has a positive and	<0.001	Hypothesis is

	significant effect on oral presentation competence.	supported

As the overall support for the hypothesised model is established, the next subsections present a more detailed examination of each hypothesis. The discussion begins with Hypothesis 1, which tested the direct effect of perceived autonomy support on feedback literacy.

4.4.2.1 Sequential Effect Analysis

This section presents the results of the sequential hypotheses (H1–H4).Figure 4.14 illustrates the four sequential stages examined in this study to provide a clearer overview of the proposed structural relationships before the individual hypotheses are tested. As shown in the figure, Stage 1 examines the relationship between perceived autonomy support and feedback literacy (H1). Stage 2 evaluates the relationship between feedback literacy and grit (H2). Stage 3 examines the relationship between grit and intrinsic motivation (H3). Finally, Stage 4 investigates the relationship between intrinsic motivation and oral presentation competence (H4).



Stage 1	Stage 2	Stage 3	Stage 4
Hypothesis 1: Perceived autonomy support has a positive and significant effect on feedback literacy.	Hypothesis 2: Feedback literacy has a positive and significant effect on grit.	Hypothesis 3: Grit has a positive and significant effect on intrinsic motivation.	Hypothesis 4: Intrinsic motivation has a positive and significant effect on oral presentation competence

Figure 4.14 Overview of the Sequential Hypotheses (H1–H4)

Guided by the sequential structure illustrated in Figure 4.14, the hypothesis testing results are presented according to the four stages of the proposed structural model. Each stage corresponds to one hypothesised relationship and is discussed individually in the following sections.

Stage 1: Perceived Autonomy Support Positively Influences Feedback Literacy (H1)

The first path tested in the structural model examined the influence of perceived autonomy support (PAS) on feedback literacy (FBL), as stated in Hypothesis 1 (H1). Table 4.35 reports the path coefficient, standard error, critical ratio, and significance value.

Table 4.35
Path Analysis Results for Hypothesis 1

Construct		Construct	Estimate	S.E.	C.R.	P	Result
Feedback Literacy	<---	Perceived Autonomy Support	.554	.058	9.507	***	Significant

Table 4.35 shows that the standardised path coefficient from PAS to FBL was 0.554, which indicates a moderate positive effect (Hair et al., 2010). The estimate had a standard error of 0.058, producing a critical ratio (C.R.) of 9.507. In SEM, the C.R. is obtained by dividing the estimate by its standard error; values exceeding 1.96 indicate significance at $p<0.05$ (Byrne, 2010). In this case, the C.R. far exceeded this threshold, and the associated probability was $p<.001$, confirming a highly significant effect.

These results support Hypothesis 1, which proposed that perceived autonomy support has a positive and significant influence on feedback literacy. The finding suggests that when students perceive stronger autonomy support in their learning environment, they are more likely to demonstrate higher levels of feedback literacy.

Stage 2: Feedback Literacy Positively Influences Grit (H2)

The second path tested in the structural model examined the influence of feedback literacy (FBL) on grit, as stated in Hypothesis 2 (H2). The results are presented in Table 4.36 below.

Table 4.36
Path Analysis Results for Hypothesis 2

Construct		Construct	Estimate	S.E.	C.R.	P	Result
Grit	<---	Feedback	.753	.087	8.696	***	Significant

Literacy							

Table 4.36 reports that the standardised path coefficient from feedback literacy to grit was 0.753, representing a strong positive effect (Hair et al., 2010). The estimate had a standard error of 0.087, producing a critical ratio (C.R.) of 8.696. In SEM, the C.R. is obtained by dividing the estimate by its standard error; values exceeding 1.96 indicate significance at $p<0.05$ (Byrne, 2010). Here, the C.R. was well above this threshold, and the associated p-value was <.001, confirming that the effect was highly significant.

These results support Hypothesis 2, which proposed that feedback literacy has a positive and significant influence on grit. The finding highlights that students with stronger feedback literacy are substantially more likely to persist in their efforts and sustain perseverance in oral presentations.

Stage 3: Grit Positively Influences Intrinsic Motivation (H3)

The third path tested in the structural model examined the influence of grit on intrinsic motivation, as stated in Hypothesis 3 (H3). The results are presented in Table 4.37.

Table 4.37
Path Analysis Results for Hypothesis 3

Construct		**Construct**	**Estimate**	**S.E.**	**C.R.**	**P**	**Result**
Intrinsic Motivation	<---	Grit	.673	.080	8.381	***	Significant

As shown in Table 4.37, grit had a standardised path coefficient of 0.673 on intrinsic motivation, representing a strong positive effect (Hair et al., 2010). The estimate had a standard error of 0.080, yielding a critical ratio (C.R.) of 8.381. In SEM, C.R. values greater than 1.96 indicate significance at $p<0.05$ (Byrne, 2010). Here, the C.R. was well above this threshold, with the associated probability $p<.001$, confirming that the effect was statistically significant.

These results support Hypothesis 3, which proposed that grit has a positive and significant influence on intrinsic motivation. This finding suggests that students who

demonstrate higher perseverance and sustained effort are more likely to develop stronger intrinsic motivation for oral presentation competence.

Stage 4: Intrinsic Motivation Positively Influences Oral Presentation Competence (H4)

The fourth path tested in the structural model examined the influence of intrinsic motivation on oral presentation competence (OPC), as stated in Hypothesis 4 (H4). The results are shown in Table 4.38.

Table 4.38
Path Analysis Results for Hypothesis 4

Construct		Construct	Estimate	S.E.	C.R.	P	Result
Oral Presentation Competence	<---	Intrinsic Motivation	.618	.090	6.852	***	Significant

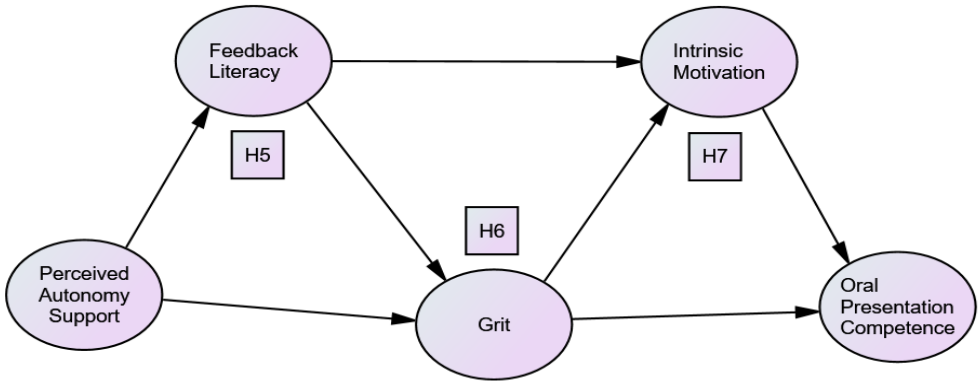
Table 4.38 shows intrinsic motivation had a standardised path coefficient of 0.618 on OPC, representing a moderately strong positive effect (Hair et al., 2010). The estimate had a standard error of 0.090, yielding a critical ratio (C.R.) of 6.852. In SEM, the C.R. is obtained by dividing the estimate by its standard error; values exceeding 1.96 indicate significance at $p<0.05$ (Byrne, 2010). Here, the C.R. was far above this threshold, and the associated p-value was <.001, confirming that the effect was statistically significant.

These results support Hypothesis 4, which proposed that intrinsic motivation has a positive and significant influence on oral presentation competence. This finding highlights the important role of intrinsic motivation in shaping students' oral presentation competence, suggesting that students who are driven by internal satisfaction and value recognition are more likely to perform competently in oral presentations.

Having established that all hypothesised sequential structural relationships were statistically significant, the next analysis examines the proposed mediated relationships to answer the second research objective.

4.4.3 Sequential Mediation Analysis

This section presents the results of the sequential mediation hypotheses (H5–H7). To provide a clearer overview of the indirect relationships examined before the individual mediation hypotheses are tested, Figure 4.15 illustrates the three mediation stages investigated in this study. As shown in the figure, Stage 1 examines whether feedback literacy serves as the first sequential mediator linking perceived autonomy support to grit (H5). Stage 2 evaluates whether grit functions as the second sequential mediator linking feedback literacy to intrinsic motivation (H6). Finally, Stage 3 investigates whether intrinsic motivation acts as the third sequential mediator linking grit to oral presentation competence (H7). Guided by the mediation structure illustrated in Figure 4.15, the findings are presented according to these three stages.



Stage 1	Stage 2	Stage 3
Hypothesis 5: Feedback literacy mediates the relationship between perceived autonomy support and grit.	Hypothesis 6: Grit mediates the relationship between feedback literacy and intrinsic motivation.	Hypothesis 7: Intrinsic motivation mediates the relationship between grit and oral presentation competence.

Figure 4.15 Overview of the Sequential Mediating Hypotheses (H5–H7)

Following the overview presented in Figure 4.15, both the direct and indirect effects were estimated using path analysis in SEM. Although each mediation hypothesis was analysed separately, the three hypotheses represent the sequential mediation nature

proposed in the conceptual model. The significance of the indirect effects was assessed using bootstrapping procedures, which provide robust confidence intervals for mediation effects (Awang, 2015; Rahlin et al., 2023). A total of 1,000 bootstrap samples were generated with 95% standard and bias-corrected confidence intervals.

The first mediation stage (H5) examines whether feedback literacy mediates the relationship between perceived autonomy support and grit. The findings are presented in the following subsection.

Stage 1: Feedback Literacy Mediates Perceived Autonomy Support and Grit (H5)

A mediation analysis was conducted to examine the first stage of the proposed sequential mediation model. As presented in Figure 4.16, the indirect path from perceived autonomy support to feedback literacy (path a) was statistically significant (β=0.55, $p < .001$), as was the path from feedback literacy to grit (path b) (β=0.75, $p < .001$). In contrast, the direct path from perceived autonomy support to grit (path c) was not statistically significant (β=–0.03, $p > 0.05$). The significance of paths a and b, together with the non-significant direct path, suggests that feedback literacy fully mediates the relationship between perceived autonomy support and grit. This mediation effect was subsequently confirmed through the bootstrapping procedure.

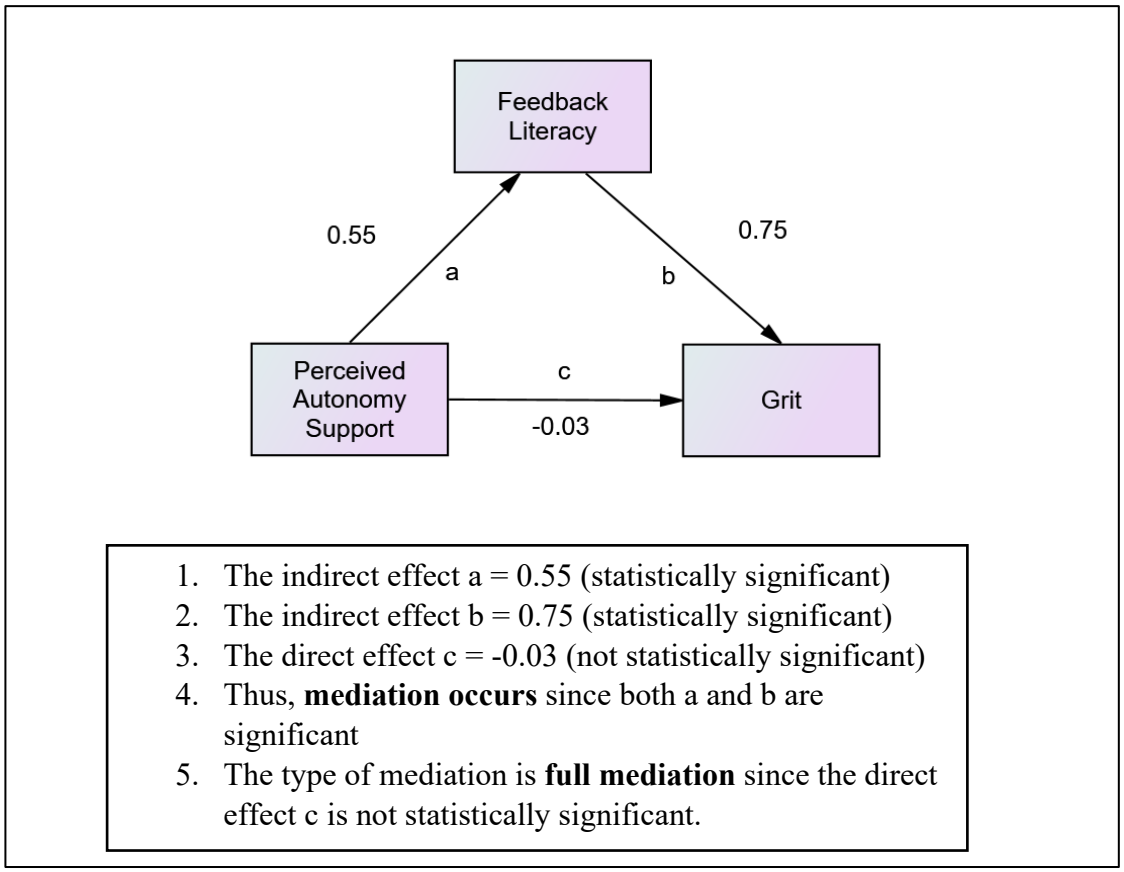


Figure 4.16 Path Analysis Results for Hypothesis 5

A bootstrapping procedure was conducted using 1000 bootstrap samples, with both standard and bias-corrected confidence intervals set at 95%, to further validate the mediation effect. As shown in Table 4.39, the bootstrapped indirect effect (a × b) was statistically significant (β=0.417, p=0.002), whereas the direct effect (c) remained non-significant (β=–0.028, p=0.463). These findings reaffirm the presence of mediation and confirm that the relationship between perceived autonomy support and grit is fully mediated by feedback literacy. The absence of a significant direct path supports the hypothesis that feedback literacy is a necessary mediator through which autonomy support fosters students' grit.

Table 4.39
Bootstrapping Result for Testing Feedback Literacy as a Mediator

	Indirect Effect (a x b)	**Direct (c)**
Bootstrapping Value	0.417	-0.028
Probability Value	0.002	0.463
Results on Mediation	Significant	Not Significant

Presence of Mediation	Mediation exists since the indirect effect is significant
Type of Mediation	Full mediation since the direct effect is not significant

In summary, the findings for Hypothesis 5 evidenced that feedback literacy fully mediates the relationship between perceived autonomy support and grit. Having established feedback literacy as the first sequential mediator, the next section explores whether grit mediates the relationship between feedback literacy and intrinsic motivation, as proposed in Hypothesis 6.

Stage 2: Grit Mediates Feedback Literacy and Intrinsic Motivation (H6)

A mediation analysis was conducted to examine the second stage of the proposed sequential mediation model. As presented in Figure 4.17, the path from feedback literacy to grit (path a) was statistically significant (β=0.75, $p<.001$), as was the path from grit to intrinsic motivation (path b) (β = 0.67, $p<.001$). The direct path from feedback literacy to intrinsic motivation (path c) was also statistically significant (β= 0.38, $p<.001$). Given that both constituent paths (a and b) and the direct path (c) were statistically significant, the results suggest the presence of partial mediation. This indicates that grit mediates the relationship between feedback literacy and intrinsic motivation, while feedback literacy also maintains a significant direct influence on intrinsic motivation. The mediation effect was subsequently confirmed through the bootstrapping procedure.

1. The indirect effect a = 0.75 (statistically significant)
2. The indirect effect b = 0.67 (statistically significant)
3. The direct effect c = 0.38 (statistically significant)
4. Thus, **mediation occurs** since both a and b are significant

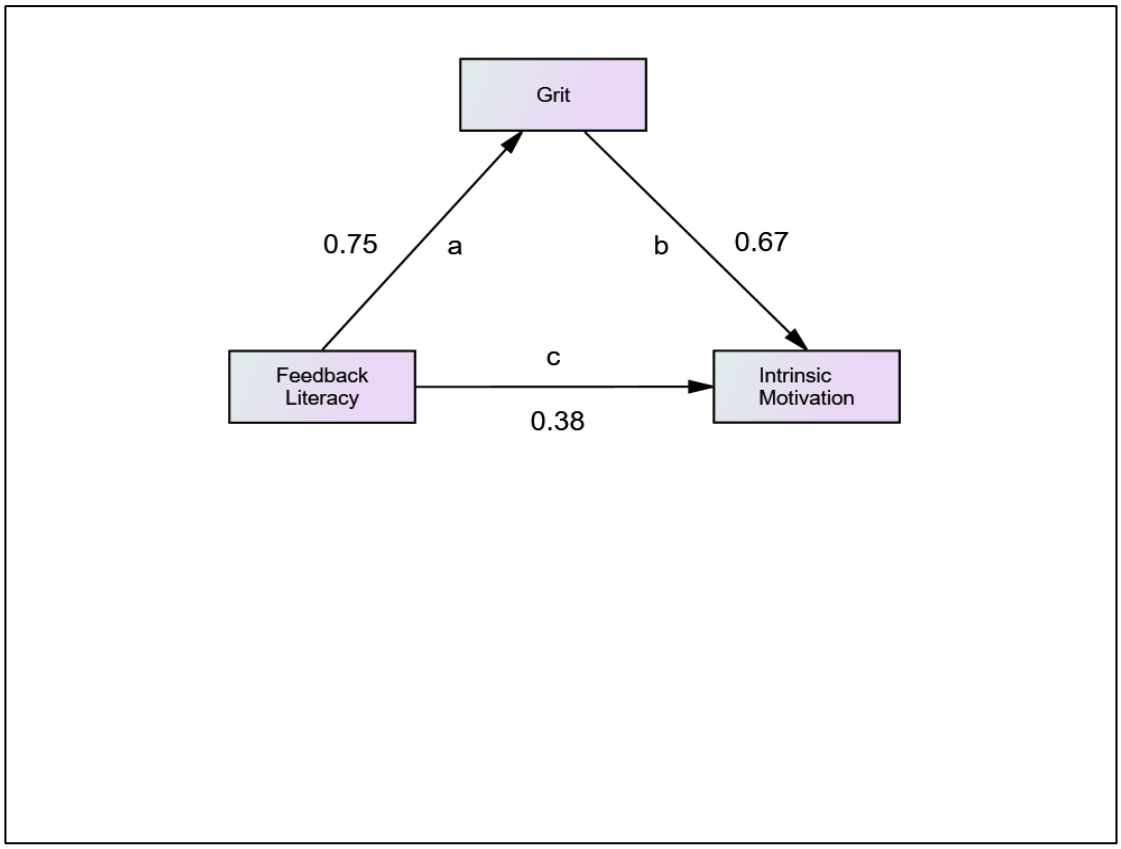


Figure 4.17 Path Analysis Results for Hypothesis 6

Given that all three effects (a, b, and c) were statistically significant, the results support the presence of partial mediation. This indicates that grit serves as a mediator through which feedback literacy enhances students' intrinsic motivation, while a direct relationship between feedback literacy and intrinsic motivation remains significant. In other words, while grit explains a substantial portion of the pathway, feedback literacy independently contributes to intrinsic motivation as well.

A bootstrapping procedure with 1000 resamples and 95% confidence intervals (standard and bias-corrected) was conducted to check and validate the mediation analysis results, as shown in Figure 4.17. As shown in Table 4.40, the bootstrapped indirect effect of feedback literacy on intrinsic motivation via grit was statistically significant (β=0.507, p=0.004), while the direct effect remained statistically significant (β=0.378, p=0.023), confirming the presence of partial mediation, and reinforcing the results of the earlier path analysis.

Table 4.40
Bootstrapping Result for Testing Grit as a Mediator

	Indirect Effect (a x b)	**Direct (c)**

Bootstrapping Value	0.507	0.378
Probability Value	0.004	0.023
Results on Mediation	Significant	Significant
Presence of Mediation	Mediation exists since the indirect effect is significant	
Type of Mediation	Partial mediation since the direct effect is also significant.	

In conclusion, this dual pathway underscores the impact of feedback literacy, not only in fostering perseverance but also in directly enhancing students' intrinsic motivation. Therefore, Hypothesis 6 is supported.

Having established grit as the second sequential mediator, the final stage of the sequential mediation model examines whether intrinsic motivation serves as the third sequential mediator linking grit to oral presentation competence.

Stage 3: Intrinsic Motivation Mediates Grit and Oral Presentation Competence (H7)

A mediation analysis was conducted to examine the final stage of the proposed sequential mediation model. As presented in Figure 4.18, the mediation analysis revealed that the indirect effect of grit on intrinsic motivation (path a) was statistically significant ($\beta=0.67$, $p<.001$), as was the indirect effect of intrinsic motivation on oral presentation competence (path b) ($\beta=0.62$, $p<.001$). In contrast, the direct effect of grit on oral presentation competence (path c) was not statistically significant ($\beta=0.03$, $p>0.05$).

These findings provide strong support for a full mediation effect, indicating that the influence of grit on students' oral presentation competence is entirely mediated by intrinsic motivation. This means that grit alone does not directly influence performance in oral presentations unless it is coupled with a strong internal drive to engage in and master the task (i.e. intrinsic motivation).

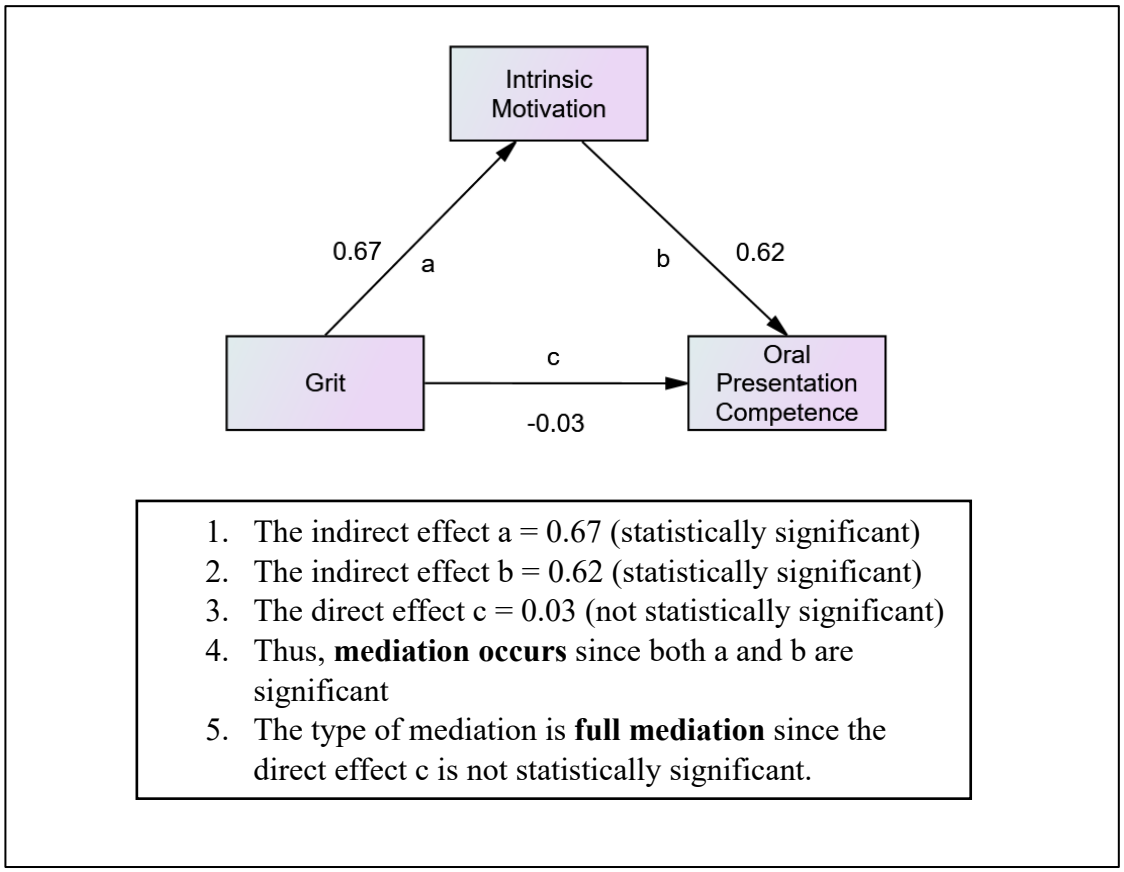


Figure 4.18 Path Analysis Results for Hypothesis 7

A bootstrapping procedure was conducted using 1000 bootstrap samples, with both standard and bias-corrected confidence intervals set at 95% to confirm the mediation effect observed in path analysis. As reported in Table 4.41, the bootstrapped indirect effect of grit on oral presentation competence via intrinsic motivation was statistically significant (β=0.416, p=0.004), while the direct effect remained non-significant (β=–0.029, p=0.819).

These findings validate the presence of a full mediation effect which reaffirms that the influence of grit on oral presentation competence operates entirely through the mediating mechanism of intrinsic motivation. The non-significant direct path supports the conclusion that grit alone does not exert a direct impact on presentation performance unless it is channelled through a student's internal motivational state.

Table 4.41
Bootstrapping Results for Testing Intrinsic Motivation as a Mediator

	Indirect Effect (a x b)	Direct (c)
Bootstrapping Value	0.416	-0.029
Probability Value	0.004	0.819
Results on Mediation	Significant	Not Significant
Presence of Mediation	Mediation exists since the indirect effect is significant	
Type of Mediation	Full mediation since the direct effect is not significant	

In conclusion, the three mediation analyses collectively provide empirical support for the proposed sequential mediation model. Specifically, feedback literacy, grit, and intrinsic motivation function as sequential mediators that progressively transmit the influence of perceived autonomy support towards oral presentation competence. The following section presents a summary of the structural model findings by consolidating the direct and indirect effects identified across the sequential mediation process.

4.5 Summary of Results

The findings from both the measurement and structural models provide robust support for the hypothesised relationships underpinning this study. All four sequential hypotheses (H1 to H4) were supported, revealing statistically significant and theoretically meaningful pathways between key psychological constructs related to students' oral presentation competence.

H1 confirmed that perceived autonomy support exerts a positive and significant influence on feedback literacy ($p<.001$), suggesting that when students feel supported in their autonomy, their feedback literacy improves. H2 established that feedback literacy significantly influences grit ($p<.001$), highlighting the role of students' feedback-related capabilities in cultivating perseverance and effort. H3 demonstrated a significant positive relationship between grit and intrinsic motivation ($p<.001$), indicating that grit is a driver of intrinsic motivation. Finally, H4 showed that intrinsic motivation significantly contributes to oral presentation competence ($p<.001$), emphasising the central role of internal motivation in enabling students to perform effectively in oral communication tasks.

These sequential effects were further clarified through mediation analyses (H5 to H7), which illuminated the mechanisms that link these constructs. The results provide evidence for two full mediation effects. First, feedback literacy fully mediated the relationship between autonomy support and grit (H5), and intrinsic motivation fully mediated the relationship between grit and oral presentation competence (H7). Grit partially mediated the relationship between feedback literacy and intrinsic motivation (H6). Together, these findings underscore the interdependent nature of students' psychological functioning in oral performance contexts, suggesting that these psychological factors play crucial mediating roles in shaping oral presentation competence.

Table 4.42
Summary of Results

Research Objective		Hypothesis Statement	P value	Results
To examine the sequential relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence.	H_1	Perceived autonomy support has a positive and significant effect on feedback literacy.	.001	Hypothesis is supported
	H_2	Feedback literacy has a positive and significant effect on grit.	.001	Hypothesis is supported
	H_3	Grit has a positive and significant effect on intrinsic motivation.	.001	Hypothesis is supported
	H_4	Intrinsic motivation has a positive and significant effect on oral presentation competence	.001	Hypothesis is supported
To examine the mediating roles of feedback literacy, grit, and intrinsic motivation in the sequential relationships among the proposed psychological factors.	H_5	Feedback literacy mediates the relationship between perceived autonomy support and grit.	.001	Hypothesis is supported (Full Mediation)
	H_6	Grit mediates the relationship between feedback literacy and intrinsic motivation.	.001	Hypothesis is supported (Partial Mediation)
	H_7	Intrinsic motivation mediates the relationship between grit and oral presentation competence.	.001	Hypothesis is supported (Full Mediation)

The cumulative evidence thus validates the proposed conceptual model and demonstrates how autonomy-supportive environments, feedback literacy, grit, and intrinsic motivation collectively account for 53% of oral presentation competence. The subsequent chapter discusses these findings in relation to the literature and highlights their theoretical and practical implications.

4.6 Chapter Summary

This chapter has presented the results of the quantitative data analysis conducted to examine the proposed conceptual model and test the study hypotheses. The chapter begins with a description of the data cleaning and editing procedures undertaken to ensure the validity and reliability of the dataset. This includes handling missing data, identifying outliers, and verifying response accuracy, resulting in a final dataset suitable for structural equation modelling. Descriptive analyses were then conducted to profile the respondents and provide an overview of the distributions and central tendencies of all measured variables. These initial analyses laid the groundwork for the subsequent inferential procedures.

The validation of the measurement model was conducted in two phases: individual confirmatory factor analyses (CFAs) for each latent construct, followed by a pooled CFA to examine the fit of the full measurement model. Both stages demonstrated satisfactory model fit indices and strong factor loadings which established the construct validity, convergent validity, and discriminant validity of the measurement model.

Subsequently, structural equation modeling (SEM) was used to test the sequential hypotheses (H1 to H4). The results showed that all hypothesised sequential relationships were statistically significant, thereby supporting the proposed relationships among perceived autonomy support, feedback literacy, grit, intrinsic motivation, and oral presentation competence. Mediation analyses were conducted using both SEM path analysis and bootstrap procedures. Three mediating hypotheses (H5 to H7) were tested. The findings revealed two cases of full mediation (H5 and H7) and one case of partial mediation (H6).

Collectively, the findings of this chapter provide strong empirical support for the hypothesised conceptual framework and underscore the importance of both sequential and mediated relationships in understanding students' oral presentation development. The next chapter discusses these findings in relation to the existing

literature, draws theoretical and practical implications, and offers directions for future research.

CHAPTER 5
DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter discusses the research findings in relation to the objectives of this study and research hypotheses. It begins with a summary of the key findings derived from the data analysis in Chapter 5, followed by a discussion of their significance in the context of existing literature. The theoretical and practical contributions of the study are also outlined to highlight their relevance and significance. In addition, this chapter addresses the limitations of this study and proposes directions for future research. The chapter concludes by highlighting the overall contributions of the research and reflecting on its relevance for both theory and practice in the context of oral presentation competence in higher education.

5.2 Research Findings Summary

This section presents a summary of the main findings in relation to the research objectives and hypotheses of the present study. Specifically, the study examined (i) the sequential hypotheses of perceived autonomy support on feedback literacy, feedback literacy on grit, grit on intrinsic motivation, and intrinsic motivation on oral presentation competence, and (ii) the mediated hypotheses of feedback literacy, grit, and intrinsic motivation in explaining the relationships between the proposed psychological constructs. The findings are summarised in Table 5.1.

Table 5.1
Research Findings Summary

Research Objectives		Research Hypothesis	Result
Research Objective 1: To examine the sequential influence of psychological factors on Malaysian undergraduates' oral presentation competence.	H1	Perceived autonomy support has a positive and significant effect on feedback literacy.	This hypothesis is supported
	H2	Feedback literacy has a positive and significant effect on grit.	This hypothesis is supported
	H3	Grit has a positive and significant effect on intrinsic motivation.	This hypothesis is supported
	H4	Intrinsic motivation has a positive and significant effect on oral presentation competence	This hypothesis is supported
Research Objective 2: To examine the mediating roles of feedback literacy, grit, and intrinsic motivation in the sequential relationships among the proposed psychological factors..	H5	Feedback literacy mediates the relationship between perceived autonomy support and grit.	Feedback literacy fully mediates the relationship between perceived autonomy support and grit.
	H6	Grit mediates the relationship between feedback literacy and intrinsic motivation.	Grit partially mediates the relationship between feedback literacy and intrinsic motivation.
	H7	Intrinsic motivation mediates the relationship between grit and oral presentation competence.	Intrinsic motivation fully mediates the relationship between grit and oral presentation competence.

As shown in Table 5.1, all four sequential hypotheses (H1–H4) were supported. Perceived autonomy support positively and significantly influenced students' feedback literacy (H1), indicating that students who perceived greater autonomy support from their instructors demonstrated higher levels of feedback literacy.

Feedback literacy also emerged as a significant factor of grit (H2), suggesting that students who actively interpret, evaluate, and utilise feedback are more likely to demonstrate the perseverance and sustained effort reflected in grit.

Grit, in turn, significantly influenced intrinsic motivation (H3), indicating that students who persist despite challenges are more likely to remain internally motivated when engaging in oral presentation tasks.

Finally, intrinsic motivation positively and significantly influenced oral presentation competence (H4), suggesting that students who are intrinsically motivated

are more likely to demonstrate higher levels of oral presentation competence. This finding highlights the importance of fostering students' intrinsic motivation in supporting the development of their oral presentation competence.

The mediating analyses also provided important insights into the psychological mechanisms underlying the proposed model. Feedback literacy fully mediated the relationship between perceived autonomy support and grit (H5), demonstrating that autonomy support contributes to students' grit through the development of feedback literacy. Grit partially mediated the relationship between feedback literacy and intrinsic motivation (H6), indicating that feedback literacy influences intrinsic motivation both directly and indirectly through students' perseverance and sustained effort. Finally, intrinsic motivation fully mediated the relationship between grit and oral presentation competence (H7), suggesting that the influence of grit on oral presentation competence operates through students' intrinsic motivation.

In terms of explanatory power, perceived autonomy support accounted for 35% of the variance in feedback literacy. Together, perceived autonomy support and feedback literacy explained 47% of the variance in grit. Perceived autonomy support, feedback literacy, and grit collectively explained 71% of the variance in intrinsic motivation. Finally, the four psychological constructs—perceived autonomy support, feedback literacy, grit, and intrinsic motivation—collectively explained 53% of the variance in oral presentation competence. Collectively, these findings indicate that the proposed COMPASS Model (Competence in Oral Presentation through Motivation, Perceived Autonomy Support, Feedback Literacy, and Grit) possesses substantial explanatory power in explaining the psychological pathways underpinning oral presentation competence among Malaysian undergraduates. This provides the basis for the discussion of the findings presented in the following sections.

5.3 Discussion of Findings

Building upon the statistical findings presented in the previous section, this section discusses the findings in relation to the two overarching research objectives of the study. The first research objective was to examine the sequential influence of psychological factors on Malaysian undergraduates' oral presentation competence, while the second research objective was to examine the mediating roles of feedback literacy, grit, and intrinsic motivation in the sequential relationships among the

proposed psychological factors. The findings are interpreted with reference to these research objectives to explain how the proposed sequential model contributes to the development of oral presentation competence. Overall, the final structural model accounted for 53% of the variance in oral presentation competence, indicating substantial explanatory power (Hair et al., 2019). To provide a systematic discussion, each hypothesis is discussed according to the proposed structural model in the following sections.

5.3.1 Hypothesis 1: Perceived Autonomy Support Positively Influences Feedback Literacy

The first relationship in the COMPASS Model establishes perceived autonomy support as the psychological starting point in explaining how oral presentation competence develops. The findings revealed that perceived autonomy support significantly influenced feedback literacy, accounting for approximately 35% of its variance. This suggests that students who perceived greater autonomy support from their lecturers were more likely to develop the knowledge, dispositions, and skills required to seek, interpret, evaluate, and apply feedback effectively. Rather than viewing autonomy support merely as a favourable classroom condition, the present findings indicate that it infuences students' readiness to engage constructively with evaluative information, thereby providing an important psychological foundation for subsequent learning processes within the COMPASS Model.

This finding is theoretically consistent with Self-Determination Theory (Ryan & Deci, 2000, 2017), which proposes that autonomy-supportive learning environments encourage students to become active agents in their own learning by fostering greater ownership, volition, and self-regulation (Reeve, 2016; Reeve & Cheon, 2021). Within oral presentation learning, this mechanism appears particularly important because students are required to repeatedly interpret, evaluate, and act upon feedback to improve subsequent presentations. Rather than perceiving feedback as external judgement, students who experience autonomy-supportive teaching may be more likely to view feedback as information that facilitates learning and self-improvement. Consequently, the present findings extend the application of Self-Determination Theory by demonstrating that autonomy support infkuences not only students' motivation and engagement, as widely reported in previous studies, but also their feedback literacy

within an oral presentation context characterised by public evaluation, repeated performance, and continuous refinement.

The present findings corroborate previous studies demonstrating a positive relationship between perceived autonomy support and feedback literacy. Zhang et al. (2024) and Chen et al. (2024) similarly reported that perceived autonomy support positively influenced feedback literacy, although both studies found that this relationship was strengthened through additional psychological mechanisms, including basic psychological need satisfaction, intrinsic motivation, and self-efficacy. The present findings support these observations by showing that perceived autonomy support remained a significant factor of feedback literacy among Malaysian undergraduates engaged in oral presentation tasks. Importantly, perceived autonomy support explained approximately 35% of the variance in feedback literacy, indicating that although autonomy support is an important factor, it does not fully explain how students develop feedback literacy. This finding therefore reinforces earlier suggestions that feedback literacy develops through multiple interacting psychological processes rather than autonomy support alone.

The findings also align with studies that have linked autonomy support to broader adaptive learning outcomes. Hernández et al. (2022) demonstrated that autonomy support promoted basic psychological need satisfaction, intrinsic motivation, and deeper learning approaches, whereas Matthews et al. (2023) reported that autonomy-supportive dialogue enhanced students' engagement with feedback. Similarly, Wang et al. (2024) found that autonomy support improved speaking performance through greater classroom engagement and psychological need satisfaction. Although these studies did not measure feedback literacy directly, they consistently suggest that autonomy-supportive learning environments encourage students to become more reflective, self-regulated, and actively engaged in their learning. The present study extends this body of literature by identifying feedback literacy as one of the psychological mechanisms through which autonomy support contributes to students' oral presentation development.

More importantly, the present findings address an important gap identified in the literature. Previous research examining the relationship between perceived autonomy support and feedback literacy has primarily been conducted in general educational settings or subject-specific learning contexts. In contrast, the present study demonstrates that this relationship also holds within oral presentation learning, where

students are required to repeatedly interpret, evaluate, and respond to immediate and often public feedback to improve subsequent performance. Demonstrating that autonomy support continues to influence feedback literacy under these conditions suggests that the explanatory value of Self-Determination Theory extends beyond general classroom learning to communication tasks characterised by heightened evaluative demands and iterative performance improvement.

These findings position perceived autonomy support as the foundational psychological condition underpinning the COMPASS Model. Autonomy support appears to initiate a developmental process by equipping students with the willingness and capacity to engage constructively with feedback. Theoretically, the findings extend the application of Self-Determination Theory by demonstrating that autonomy-supportive teaching influence feedback literacy within oral presentation learning, thereby broadening the theory's explanatory value to encompass students' evaluative engagement with feedback in performance-based communication contexts. Collectively, these findings suggest that autonomy support represents not merely a supportive classroom characteristic but the psychological starting point from which the subsequent motivational processes within the COMPASS Model emerge.

5.3.2 Hypothesis 2: Feedback Literacy Positively Influences Grit

The second relationship in the COMPASS Model demonstrated that feedback literacy significantly influences grit. This finding suggests that students who possess stronger feedback literacy are more likely to sustain effort and perseverance while developing their oral presentation competence. Feedback-literate students appear better able to interpret evaluative information as guidance for improvement, thereby maintaining their commitment despite repeated performance challenges. Within oral presentation learning, where presentations are repeatedly prepared, delivered, evaluated, and refined, the ability to engage constructively with feedback may help explain why students demonstrate greater perseverance throughout the learning process.

This finding contributes to an emerging yet still contested area of research concerning the relationship between feedback literacy and grit. Previous studies have predominantly conceptualised grit as an antecedent of students' attitudes towards feedback. For example, Weidlich et al. (2025) found that perseverance of effort demonstrated only a modest association with feedback attitudes, whereas consistency

of interest showed no significant relationship. More recent studies, however, have begun to suggest the reverse pathway, arguing that students' engagement with feedback may itself contribute to the development of perseverance (Luan & Quan, 2025; Zhang & Jiang, 2025). The present findings provide empirical support for this emerging perspective by demonstrating that feedback literacy significantly influence grit within oral presentation learning. In doing so, the study challenges the traditional assumption that grit functions primarily as a stable personal characteristic (Rhodes & Giovannetti, 2022) and instead supports growing evidence that perseverance may be cultivated through repeated engagement with meaningful feedback (Ye et al., 2025).

The findings are also theoretically consistent with Self-Determination Theory, which proposes that students are more likely to sustain effort when their need for competence is supported (Ryan & Deci, 2000, 2020). Feedback literacy may contribute to this process by enabling students to interpret feedback constructively, identify achievable improvements, and recognise their progress across successive presentations (Ajjawi et al., 2023; Carless & Boud, 2018). These experiences are likely to reinforce students' perceptions of competence, making continued effort worthwhile despite repeated evaluation. From this perspective, feedback literacy may help explain why students demonstrate greater grit by enabling them to experience progress rather than repeated failure throughout the presentation learning process. Consequently, the present findings extend the application of Self-Determination Theory by demonstrating that feedback literacy influences students' perseverance within an oral presentation context characterised by continuous evaluation, iterative improvement, and repeated performance.

Although grit was conceptualised and analysed as a higher-order construct comprising perseverance of effort and consistency of interest, the present findings appear to have greater conceptual relevance to perseverance of effort. Oral presentation competence develops through repeated cycles of preparation, presentation, feedback, reflection, and revision. Such iterative learning behaviours are more closely associated with sustained effort in overcoming challenges than with maintaining stable interests over time. This interpretation is consistent with Weidlich et al. (2025), who similarly observed that perseverance of effort demonstrated stronger associations with feedback-related outcomes than consistency of interest. Nevertheless, because the present study examined grit as an overall construct rather than its individual dimensions, it cannot be concluded from the present findings that feedback literacy influences one dimension

more strongly than the other. Future research should therefore examine whether feedback literacy differentially infuences perseverance of effort and consistency of interest across repeated oral presentation tasks.

More importantly, the present findings suggest that feedback literacy represents more than an evaluative capability. Within oral presentation learning, it appears to function as a motivational resource that enables students to persist through repeated cycles of preparation, performance, feedback, and revision. This finding is particularly important because oral presentation competence rarely develops through a single presentation but instead requires continuous improvement across multiple performance opportunities. Students who are able to interpret feedback constructively may therefore be more likely to remain committed to this developmental process, ultimately strengthening their perseverance throughout presentation learning.

Taken together, these findings suggest that feedback literacy may represent an important psychological mechanism through which students transform evaluative experiences into sustained perseverance. Within the proposed COMPASS Model, feedback literacy appears to serve as the psychological bridge linking autonomy-supportive learning environments to students' long-term persistence. Theoretically, the present study contributes to the growing literature by demonstrating that feedback literacy influences grit within oral presentation learning, thereby highlighting an important psychological process that may help explain how students sustain continuous improvement in performance-based communication tasks.

5.3.3 Hypothesis 3: Grit Positively Influences Intrinsic Motivation

The third relationship in the COMPASS Model demonstrated that grit significantly influences intrinsic motivation. This finding suggests that students who demonstrate greater perseverance and sustained commitment are more likely to develop stronger intrinsic motivation towards oral presentation learning. Within oral presentation contexts, where students frequently encounter performance anxiety, repeated practice, evaluative feedback, and public scrutiny (Mohamed et al., 2023), sustained perseverance may enable students to experience gradual improvement in their presentation performance. These repeated mastery experiences are likely to increase students' confidence, enjoyment, and personal value of oral presentation learning, thereby contributing to the development of stronger intrinsic motivation over time.

From the perspective of Self-Determination Theory, this finding can be understood through the process of internalisation and the satisfaction of learners' need for competence (Ryan & Deci, 2000, 2020). Students who persist through repeated presentation challenges are more likely to recognise their own progress despite initial setbacks. Such mastery experiences are likely to strengthen students' perceptions of competence, which subsequently support the development of intrinsic motivation. Rather than viewing grit and intrinsic motivation as independent psychological constructs, the present findings support the proposition advanced in Chapter 2 that sustained perseverance may create the conditions through which intrinsic motivation gradually develops and is maintained. Consequently, the present findings broaden the application of Self-Determination Theory by demonstrating that grit influences intrinsic motivation within an oral presentation context characterised by continuous evaluation, repeated practice, and progressive skill development.

The present findings are consistent with previous studies reporting that grit positively influences intrinsic motivation across different educational contexts. Song (2024), Chuented et al. (2023), Lee and Park (2024), and Feng and Papi (2020) similarly found that learners who demonstrated greater perseverance were more likely to report stronger intrinsic motivation. Importantly, these studies consistently suggested that this relationship was facilitated through learners' orientation towards mastery, personal growth, and meaningful engagement with learning rather than perseverance alone. The present findings reinforce this perspective by demonstrating that the relationship also holds within oral presentation learning, where students must repeatedly rehearse, perform, receive evaluative feedback, and refine subsequent performances. In doing so, the study addresses an important gap identified in Chapter 2 by extending existing evidence from general educational and second language learning contexts to a communication context characterised by repeated performance and continuous improvement.

At the same time, previous research has also provided evidence for the reverse pathway by conceptualising intrinsic motivation as an antecedent of grit. For example, Pleace and Nicholls (2022) and Jeong-Hun and Kim (2019) reported that intrinsically motivated learners were more likely to demonstrate greater perseverance over time. Rather than contradicting these findings, the present study suggests that the relationship between grit and intrinsic motivation may be reciprocal. While previous studies demonstrate that intrinsic motivation can encourage greater perseverance, the present

findings provide empirical support for the reverse pathway by showing that sustained perseverance also influences intrinsic motivation. Collectively, these findings suggest that grit and intrinsic motivation may reinforce one another throughout students' learning experiences, particularly in contexts requiring repeated practice and continuous performance improvement.

Although grit was conceptualised and analysed as a higher-order construct comprising perseverance of effort and consistency of interest, the present findings appear to have greater conceptual relevance to perseverance of effort. Oral presentation competence develops through repeated cycles of preparation, rehearsal, presentation, feedback, reflection, and revision. Such iterative learning behaviours align more closely with sustained effort despite challenges than with maintaining stable interests over time. This interpretation is also consistent with the literature reviewed in Chapter 2, where perseverance of effort demonstrated more consistent associations with intrinsic motivation than consistency of interest (Feng & Papi, 2020; Lee & Park, 2024). Nevertheless, because grit was analysed as a higher-order construct, the present study cannot conclude whether perseverance of effort or consistency of interest was more strongly influenced. Future research should therefore examine whether these dimensions contribute differently to the development of intrinsic motivation during repeated oral presentation learning.

Taken together, these findings suggest that grit influences intrinsic motivation while contributing to an ongoing theoretical debate regarding the directionality of this relationship. Rather than viewing grit solely because of intrinsic motivation, the present findings provide empirical support for the reverse pathway by demonstrating that sustained perseverance influences intrinsic motivation within oral presentation learning. Within the proposed COMPASS Model, grit therefore represents the psychological link between students' persistence in responding to repeated presentation challenges and their gradual internalisation of oral presentation learning as an intrinsically meaningful and personally rewarding activity.

5.3.4 Hypothesis 4: Intrinsic Motivation Positively Influences Oral Presentation Competence

The fourth relationship in the COMPASS Model demonstrated that intrinsic motivation significantly influenced oral presentation competence, providing empirical

support for Hypothesis 4. Students with higher levels of intrinsic motivation were more likely to demonstrate stronger oral presentation competence, suggesting that motivation grounded in genuine interest, enjoyment, and personal value is associated with higher levels of presentation performance. In the present study, intrinsic motivation explained a substantial proportion of the variance in oral presentation competence, highlighting its importance as a psychological factor of students' ability to develop effective oral presentation skills. Within oral presentation learning, students who are intrinsically motivated appear more willing to invest sustained effort in researching presentation content, rehearsing repeatedly, refining delivery strategies, and responding constructively to feedback. These continued learning behaviours are likely to contribute to higher levels of oral presentation competence over time.

The present findings are theoretically consistent with Self-Determination Theory, which proposes that intrinsically motivated learners engage in learning activities because they perceive them as inherently meaningful, enjoyable, and personally valuable (Ryan & Deci, 2000, 2020). Within oral presentation learning, intrinsic motivation may encourage students to participate more actively in the iterative processes of preparation, rehearsal, reflection, and performance refinement that characterise effective presentation development. Rather than representing merely a favourable psychological state, intrinsic motivation appears to function as an important motivational resource that influences students' sustained engagement with these learning processes. Consequently, the present findings broaden the application of Self-Determination Theory by demonstrating that intrinsic motivation influences oral presentation competence within a performance-based communication context characterised by repeated practice, evaluative feedback, and continuous skill development.

The present findings are consistent with previous research demonstrating positive associations between intrinsic motivation and learning performance across diverse educational settings. Paloș et al. (2025) found that intrinsically motivated students were more likely to adopt deep learning strategies, while Hernández et al. (2022) reported that intrinsic motivation influenced students' perceived professional competence when autonomy and competence needs were supported. Similarly, Khodadady and Khajavy (2013), Kholifah et al. (2021), and Teo et al. (2023) showed that intrinsic motivation was positively associated with speaking proficiency, learning performance, and reduced presentation anxiety. Collectively, these studies suggest that

intrinsic motivation encourages greater cognitive engagement, confidence, and sustained effort, all of which contribute to successful performance. The present findings reinforce this evidence by demonstrating that intrinsic motivation also influences oral presentation competence within higher education.

More importantly, the present findings address an important gap identified in Chapter 2. Previous studies have primarily examined the influence of intrinsic motivation on broader academic outcomes, speaking proficiency, presentation confidence, or learning performance rather than oral presentation competence itself. In contrast, the present study conceptualised oral presentation competence as a multidimensional construct comprising presentation content, multimodal competence, and professionalism. Demonstrating that intrinsic motivation influences this broader conceptualisation of competence extends previous literature by providing a more comprehensive understanding of how motivation contributes to effective oral presentation performance beyond isolated measures of speaking ability or presentation scores.

Previous research has also reported mixed findings regarding the relative importance of intrinsic and extrinsic motivation in oral presentation learning. Liang and Kelsen (2018) found that extrinsic motivation was a stronger factor of oral presentation performance within an assessment-driven context, suggesting that external motives may sometimes play a more influential role. In contrast, Bolívar-Cruz and Verano-Tacoronte (2018) and Tanveer (2007) highlighted the importance of learners' internal motivational states in supporting presentation confidence, engagement, and communicative performance. The present findings help clarify this debate by demonstrating that intrinsic motivation significantly influences oral presentation competence when competence is conceptualised as a multidimensional construct rather than a single indicator of presentation performance. These findings therefore suggest that intrinsic motivation remains an important factor of oral presentation competence despite the evaluative nature of presentation tasks.

These findings position intrinsic motivation as the final psychological process through which the preceding mechanisms within the COMPASS Model culminate in oral presentation competence. Rather than representing merely a favourable psychological disposition, intrinsic motivation appears to influence students' sustained engagement with the preparation, rehearsal, refinement, and delivery processes required for effective oral presentations. Theoretically, the present study contributes to the

literature by demonstrating that intrinsic motivation influences multidimensional oral presentation competence, thereby clarifying previous mixed findings regarding the role of motivation in performance-based learning and broadening the application of Self-Determination Theory to oral presentation learning.

5.3.5 Hypothesis 5: Feedback Literacy Mediates Perceived Autonomy Support and Grit

The first sequential mediated relationship in the COMPASS Model demonstrated that perceived autonomy support significantly influenced grit indirectly through feedback literacy. This finding represents the first stage of the proposed sequential mediation model, whereby feedback literacy functions as the first sequential mediator linking perceived autonomy support and grit.

The absence of a significant direct relationship suggests that the influence of perceived autonomy support on grit is better explained through students' feedback literacy. Rather than directly influencing students' grit, autonomy-supportive learning environments appear to encourage the development of feedback literacy, which subsequently influencing greater grit during oral presentation learning. This finding therefore suggests that feedback literacy represents the first sequential psychological process linking supportive learning environments with students' grit.

The present findings are theoretically consistent with Self-Determination Theory, which proposes that supportive learning environments influence students' motivation and behaviour through internal psychological processes rather than through direct contextual effects (Jang et al., 2010; Ryan & Deci, 2000, 2020). From this perspective, contextual support creates conditions that encourage students to become active participants in their own learning, but its influence is realised through learners' subsequent psychological and behavioural processes. The present findings provide empirical support for the proposition advanced in Chapter 2 that feedback literacy represents one such psychological process. Students who perceive greater autonomy support appear more likely to engage actively with feedback, and this evaluative engagement may subsequently influence greater perseverance during repeated oral presentation learning. Consequently, feedback literacy appears to represent the first sequential psychological mechanism through which contextual support becomes associated with grit within the proposed COMPASS Model.

The present findings also extend previous mediation research. Zhang et al. (2024) demonstrated that autonomy support infuenced feedback literacy directly and indirectly through basic psychological need satisfaction and intrinsic motivation, whereas Wu et al. (2025) reported that feedback literacy mediated the relationship between teacher support and academic achievement. Although these studies examined different educational outcomes, they consistently suggested that feedback literacy functions as an important psychological mechanism linking supportive learning environments with positive learning outcomes. The present findings extend this body of literature by demonstrating that feedback literacy functions as the first sequential mediator linking perceived autonomy support and grit, thereby broadening its explanatory role beyond academic achievement and motivation to include students' perseverance during oral presentation learning.

The absence of a significant direct relationship between perceived autonomy support and grit may also be understood by considering the distinction between contextual and individual-level constructs. Perceived autonomy support reflects students' perceptions of their learning environment, whereas grit represents a relatively enduring disposition characterised by sustained perseverance towards long-term goals (Duckworth et al., 2007). Because oral presentation learning is characterised by shorter-term, iterative performance tasks involving repeated preparation, presentation, feedback, reflection, and revision (Heideman & Laury, 2021), contextual support may not influence grit directly. Instead, its influence appears to operate through more immediate learning processes, such as students' engagement with feedback. Demonstrating this indirect relationship therefore extends grit research beyond long-term educational settings by suggesting that perseverance may also develop within repeated, performance-based communication contexts.

The present findings suggest that perceived autonomy support influences grit indirectly through students' feedback literacy. Within the COMPASS Model, feedback literacy functions as the first sequential mediator, representing the initial psychological bridge through which supportive learning environments become associated with students' sustained perseverance. This first sequential mediation stage establishes the foundation for the subsequent psychological processes involving grit and intrinsic motivation, which collectively explain the development of oral presentation competence.

5.3.6 Hypothesis 6: Grit Mediates Feedback Literacy and Intrinsic Motivation

The second sequential mediated relationship in the COMPASS Model demonstrated that feedback literacy significantly influenced intrinsic motivation indirectly through grit. As the second stage of the proposed sequential mediation model, grit functions as the second sequential mediator linking feedback literacy and intrinsic motivation. Because the direct relationship between feedback literacy and intrinsic motivation remained significant, the findings indicate that grit strengthens, but does not fully explain, how feedback literacy contributes to students' intrinsic motivation. This suggests that while students' ability to interpret, evaluate, and apply feedback directly supports intrinsic motivation, perseverance further reinforces this relationship by enabling students to sustain their effort throughout repeated cycles of oral presentation learning. Within oral presentation contexts, where students must repeatedly receive, interpret, and implement evaluative feedback while refining both their content and delivery, grit appears to facilitate the sustained engagement required for feedback literacy to translate into stronger intrinsic motivation.

The present findings are theoretically consistent with Self-Determination Theory, which proposes that learners develop intrinsic motivation through internal psychological processes associated with competence and internalisation (Ryan & Deci, 2020). Feedback literacy enables students to engage constructively with evaluative information, but repeatedly acting upon feedback requires sustained perseverance despite mistakes, repeated rehearsal, and performance pressure. From this perspective, grit appears to function as a conditional psychological mechanism within the motivational pathway proposed by SDT. By enabling students to persist through repeated feedback cycles and recognise their gradual improvement, grit may facilitate mastery experiences that strengthen students' sense of competence and subsequently support the development of intrinsic motivation. Consequently, the present findings extend the application of Self-Determination Theory by demonstrating that grit represents an important, although not exclusive, sequential psychological process through which productive engagement with feedback contributes to intrinsic motivation during oral presentation learning.

The present findings are also consistent with previous studies positioning grit functions as the second sequential mediator, partially transmitting the influence of feedback literacy to intrinsic motivation, thereby expanding its explanatory role to oral

presentation competence. Gao et al. (2024), Noughabi and Ghasemi (2024), and Zhang and Jiang (2025) similarly demonstrated that grit mediated relationships involving teacher support, learning opportunities, feedback engagement, and communication-related outcomes. Collectively, these studies suggest that perseverance enables students to transform productive learning experiences into sustained motivation. The present findings extend this body of literature by demonstrating that grit also partially mediates the relationship between feedback literacy and intrinsic motivation, thereby expanding its explanatory role to oral presentation learning, where students must repeatedly engage with evaluative feedback while maintaining their motivation to improve.

Nevertheless, the present ordering reflects the sequential developmental process proposed in the model whereby students first engage constructively with feedback, subsequently persist in acting upon that feedback, and gradually develop stronger intrinsic motivation through repeated mastery experiences. Bai and Hu (2025) and Usher et al. (2019) reported that other psychological resources may better explain motivational outcomes under different educational conditions. Consistent with these findings, the present study observed partial rather than full mediation, suggesting that grit's contribution should be understood as context-dependent rather than universal. Feedback literacy therefore appears to contribute to intrinsic motivation both directly and indirectly through perseverance, indicating that motivational development is likely to involve multiple complementary psychological processes rather than a single pathway.

The partial mediation observed in the present study may also reflect the collectivist educational context in which the study was conducted. Previous research suggests that perseverance of effort demonstrates more consistent relationships with learning outcomes than consistency of interest, particularly within collectivist settings (Disabato et al., 2019; Jandu & Pradhan, 2025; Kim & Lee, 2021). Because grit was analysed as a higher-order construct, it is possible that perseverance of effort contributed more strongly to the mediation than consistency of interest, although this distinction could not be determined from the present findings. Future research should therefore examine whether the two dimensions of grit contribute differently to the relationship between feedback literacy and intrinsic motivation.

Although the present study positioned grit as the mediator between feedback literacy and intrinsic motivation, previous studies have also suggested the reverse pathway whereby intrinsic motivation influences grit (Pleace & Nicholls, 2021; Yoo,

2025). Rather than viewing these findings as contradictory, the present findings suggest that the relationship between grit and intrinsic motivation may be reciprocal. Nevertheless, the present ordering reflects the developmental sequence proposed in the COMPASS Model and the iterative nature of oral presentation learning, whereby students first engage constructively with feedback, subsequently persist in acting upon that feedback, and gradually develop stronger intrinsic motivation through repeated mastery experiences.

Taken together, the present findings suggest that grit partially explains how feedback literacy influences intrinsic motivation during oral presentation learning. Within the proposed COMPASS Model, grit functions as the second sequential mediator, representing the intermediate psychological process through which students transform constructive engagement with feedback into sustained intrinsic motivation. This second stage builds upon the preceding role of feedback literacy and prepares the pathway for intrinsic motivation to function as the final sequential mediator leading to oral presentation competence. The finding of partial mediation further indicates that feedback literacy contributes to intrinsic motivation both directly and indirectly through perseverance, highlighting that motivational development involves multiple complementary psychological processes. Theoretically, these findings broaden the application of Self-Determination Theory by demonstrating that perseverance facilitates, but does not fully determine, the internalisation of productive engagement with feedback into intrinsic motivation within oral presentation learning.

5.3.7 Hypothesis 7: Intrinsic Motivation Mediates Grit and Oral Presentation Competence

The third sequential mediated relationship in the COMPASS Model demonstrated that grit significantly influenced oral presentation competence indirectly through intrinsic motivation. As the final stage of the proposed sequential mediation model, intrinsic motivation functions as the third sequential mediator linking grit and oral presentation competence. Because the direct relationship between grit and oral presentation competence was no longer significant after intrinsic motivation was included, the findings indicate that intrinsic motivation fully explains the relationship between grit and oral presentation competence within the present study. This suggests that while perseverance enables students to sustain their effort throughout repeated

preparation, rehearsal, and presentation, these efforts are more likely to contribute to oral presentation competence when accompanied by genuine interest, enjoyment, and personal value towards presentation learning. Within oral presentation contexts, where students must repeatedly refine both their content and delivery while responding to evaluative feedback, intrinsic motivation appears to represent the psychological process through which sustained perseverance is translated into competent performance.

The present findings are theoretically consistent with Self-Determination Theory, which proposes that learners' persistence contributes to competence when the learning activity becomes internalised and personally meaningful (Ryan & Deci, 2000, 2020). Students who demonstrate greater perseverance are more likely to sustain repeated rehearsal, respond constructively to feedback, recognise their own progress, and experience increasing competence throughout oral presentation learning. These mastery experiences subsequently strengthen intrinsic motivation, encouraging students to continue refining their presentation performance. From this perspective, intrinsic motivation represents the final sequential psychological mediator through which grit influences oral presentation competence. Consequently, the present findings advance Self-Determination Theory by demonstrating that sustained effort alone may not be sufficient for competence development unless accompanied by autonomous regulation.

The present findings are also consistent with previous studies positioning intrinsic motivation as an important psychological mechanism linking supportive psychological experiences with positive educational outcomes. Li et al. (2022), Shin and Bolkan (2020), and Tokan and Imakulata (2019) similarly demonstrated that intrinsic motivation mediated relationships involving autonomy-supportive teaching, intellectually stimulating teaching behaviours, engagement, and learning achievement. Although these studies examined different antecedents and educational outcomes, they consistently suggested that intrinsic motivation translates supportive psychological experiences into positive learning outcomes. The present findings extend this body of literature by demonstrating that intrinsic motivation also mediates the relationship between grit and oral presentation competence within oral presentation learning.

More importantly, the present findings address an important gap identified in Chapter 2. Previous studies have primarily examined intrinsic motivation as a mediator between teaching practices and general educational outcomes rather than as the psychological mechanism linking learners' perseverance with oral presentation competence. The present findings therefore extend existing literature by demonstrating

that intrinsic motivation mediates the relationship between grit and oral presentation competence within a performance-based communication context characterised by repeated rehearsal, constructive engagement with feedback, performance anxiety, and audience evaluation. These findings provide further evidence that oral presentation competence develops not only through sustained effort but also through learners' ability to internalise the value of repeated presentation practice.

The finding of full mediation should nevertheless be interpreted within the context of the present study. Although intrinsic motivation fully mediated the relationship between grit and oral presentation competence in the present study, this does not necessarily imply that grit cannot exert direct effects in other educational contexts. Previous research has reported direct associations between grit and learning performance, suggesting that the strength and nature of this relationship may vary according to contextual factors, task characteristics, and the psychological processes incorporated within different theoretical models. The present findings therefore suggest that the influence of grit on oral presentation competence is contingent upon intrinsic motivation within the proposed COMPASS Model rather than universally operating through this pathway across all learning contexts.

Although the present study positioned intrinsic motivation as the mediator between grit and oral presentation competence, previous studies have also suggested the reverse pathway whereby intrinsic motivation influences subsequent increases in grit (Jeong-Hun & Kim, 2019; Pleace & Nicholls, 2022). Rather than viewing these findings as contradictory, the present findings suggest that the relationship between grit and intrinsic motivation may be reciprocal. Nevertheless, the ordering proposed in the COMPASS Model reflects the sequential developmental process of oral presentation learning, whereby students first demonstrate perseverance during repeated preparation and rehearsal, gradually internalise the value of these learning experiences, and subsequently develop stronger intrinsic motivation that contributes to oral presentation competence.

Taken together, the present findings suggest that grit influences oral presentation competence indirectly through intrinsic motivation within oral presentation learning. Within the proposed COMPASS Model, intrinsic motivation functions as the third and final sequential mediator, representing the final psychological factor through which sustained perseverance is translated into oral presentation competence. Collectively, the three sequential mediation stages demonstrate that oral presentation

competence develops through a progressive sequence of interconnected psychological processes, beginning with supportive learning environments, progressing through feedback literacy, grit, and intrinsic motivation, and culminating in competent oral presentation performance. Theoretically, these findings advance Self-Determination Theory by demonstrating that grit contributes to competence when accompanied by intrinsic motivation, while acknowledging that reciprocal relationships between grit and intrinsic motivation remain theoretically plausible and warrant further investigation.

5.4 Research Contributions

The contributions of this study are threefold, encompassing theoretical, methodological, and practical dimensions. Theoretically, the study advances understanding of psychological factors that influence oral presentation competence by integrating perceived autonomy support, feedback literacy, grit, and intrinsic motivation into a unified model referred to as the COMPASS Model. Methodologically, it contributes through the development and validation of the Oral Presentation Competence Inventory (OPCI), providing a reliable tool for future research. Practically, the findings offer insights for educators and curriculum designers to strengthen pedagogical practices and support students in developing effective oral presentation skills.

5.4.1 Theoretical Contribution

By examining psychological factors that have been underexplored in oral presentation research, this study offers several theoretical contributions that extend existing knowledge.

First, it integrates perceived autonomy support, feedback literacy, grit, and intrinsic motivation into a unified model of oral presentation competence. While prior studies have tended to examine these psychological factors in isolation, this study establishes their direct pathways, clarifying both the extent and significance of their influence on oral presentation competence. This is important because it demonstrates that oral presentation competence is not merely a linguistic skill, but an outcome shaped by multiple interrelated psychological factors.

Second, the study refines theoretical understanding by elucidating the mediational mechanisms among these psychological factors. The finding that grit is a partial mediator, and intrinsic motivation and feedback literacy as full mediators, underscores that these factors operate as dynamic mechanisms rather than fixed traits. This matters because it explains how psychological influences work together to shape performance, thereby confirming and extending the explanatory scope of Self-Determination Theory to the specific context of oral presentations.

Third, the study foregrounds feedback literacy as a theoretically significant factor and also a mediator in oral presentation research. While it has been increasingly acknowledged in the broader literature as central to effective learning processes (Ketonen et al., 2020; Rad & Mirzaei, 2024; Song, 2022; Stahl et al., 2024), its mediating role has rarely been examined. By empirically confirming its role, particularly between autonomy support and grit, this study strengthens its theoretical relevance and positions feedback literacy as a psychological factor integral to oral presentation competence (Weidlich et al., 2025).

Finally, the study contributes to theory-building through the development and validation of the COMPASS model, which explains 53% of the variance in oral presentation competence. Beyond providing empirical evidence, the model advances theory by demonstrating that oral presentation competence can be systematically explained through psychological pathways. Its significance lies in offering a consolidated framework that integrates perceived autonomy support, feedback literacy, grit, and intrinsic motivation into a single explanatory model. By doing so, the COMPASS model (Figure 5.1) provides further clarity on how these psychological factors collectively shape oral presentation outcomes and establishes a foundation for future theoretical extensions in both oral presentation-based and self-determination theory-based research.

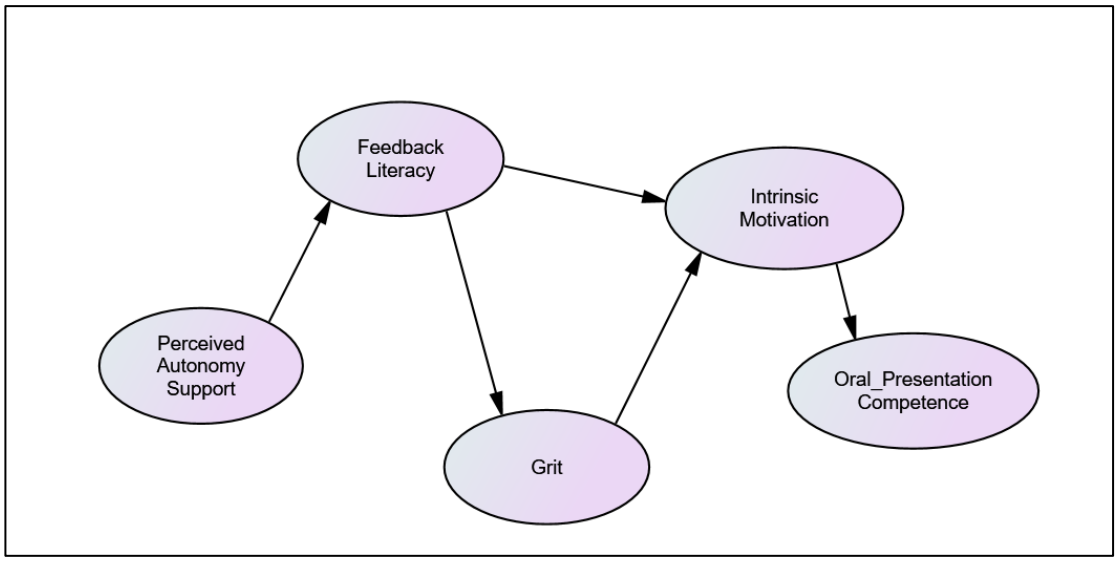


Figure 5.1 COMPASS Model

Importantly, in refining this model, the study extends Radzuan's (2023) Oral Presentation-Multimodal Framework, which originally conceptualised oral presentation competence around knowledge (context and content quality), attitude (professionalism, confidence, and time management), and skills (verbal). Through rigorous testing using exploratory and confirmatory factor analyses employed in this study, these dimensions were reconceptualised into content mastery, audience engagement, and delivery. This refinement not only validates and adapts the framework for the Malaysian higher education context but also contributes to theoretical discourse by offering a more empirically robust structure for understanding oral presentation competence. The significance of this contribution lies in demonstrating that oral presentation competence can be systematically explained through psychological pathways, while also clarifying its core competencies for future research and pedagogical application.

Having established the theoretical contribution, the next section presents the methodological contributions of this study.

5.4.2 Methodological Contributions

In addition to its theoretical insights, the study offers several methodological contributions that strengthen both the design and the analytical procedures employed.

First, it incorporates preliminary research prior to the main data collection, which included interviews with four hiring managers and an exploratory survey with 112 students. Although these procedures are not originally part of the research design,

they proved essential in contextualising oral presentation competence and establishing its relevance as a genuine issue rather than one confined to theoretical discussion. The inclusion of these steps demonstrates the methodological value of integrating exploratory qualitative and quantitative procedures within predominantly quantitative studies. As such, it provides a useful reference for future researchers, particularly those employing survey-based designs, to strengthen their background understanding of the phenomenon before conducting large-scale data collection.

Second, the study contributes methodologically through the development and validation of the Oral Presentation Competence Inventory (OPCI), which was subjected to rigorous testing using both exploratory (EFA) and confirmatory factor analyses (CFA). The inventory incorporates scales for five constructs, with items adapted from established instruments in the relevant literature. For instance, the Intrinsic Motivation Inventory (IMI) was used as the main adaptation source for intrinsic motivation in this research. Following EFA, the intrinsic motivation scale was reconceptualised into two empirically distinct subconstructs, namely satisfaction-driven motivation (SDM) and value-recognition motivation (VRM), while two items were removed during CFA to improve reliability and validity. These procedures represent a significant contribution as they not only refined the conceptualisation of intrinsic motivation but also ensured that the OPCI stands as a psychometrically sound tool for future research on oral presentation competence.

Third, this study employed structural equation modelling (SEM) by means of path analysis to test the hypothesised relationships and incorporated bootstrapping procedures to confirm mediation effects. The use of SEM in this context represents a methodological advancement, as SEM is more commonly applied in business research (Guenther et al., 2023) and has recently gained traction within social sciences (Jing & Salman, 2025), particularly in the language testing and evaluation area (e.g. Alamer, 2025). By applying SEM rigorously in the domain of oral presentation research, this study demonstrates its suitability and utility in testing complex psychological models, thereby providing a methodological benchmark for future empirical work in this field.

5.4.3 Practical Contributions

Finally, this study offers several practical contributions for different stakeholder groups. First, for educators and curriculum designers, the findings provide a framework to guide instructional design, assessment rubrics, and feedback practices in presentation-based courses. The significance of this lies in moving beyond checklist-style evaluations toward approaches that target psychological constructs such as feedback literacy, grit, and intrinsic motivation. This enables educators not only to improve technical delivery but also to foster students' psychological readiness, which is essential for effective performance in both academic and professional settings.

Second, universities and institutional quality units can benefit from the validated Oral Presentation Competence Inventory (OPCI), which provides a measurable and reliable structure for embedding into academic advising, learning support services, and graduate attribute tracking systems. The value of this contribution is that it allows institutions to benchmark oral presentation competence across programmes in a transparent and systematic way, particularly during curriculum review cycles. By doing so, institutions can ensure that oral communication training is evidence-based and aligned with broader quality assurance and accreditation requirements.

Third, for employers and industry training managers, the Oral Presentation Competence Inventory (OPCI) can serve as a tool to screen candidates, coach interns, or evaluate client-facing employees in industries that require strong interpersonal and persuasive communication skills. The practical relevance of this contribution lies in its focus on transferable psychological traits such as feedback literacy and grit, which align with industry expectations for adaptability, resilience, and lifelong learning which are qualities that are increasingly valued in competitive labour markets.

Finally, the study provides a foundation for developing targeted training programmes and resources to enhance oral presentation skills among students. By incorporating both skill-based and psychological dimensions, such training can be more effective than traditional approaches that focus narrowly on delivery techniques. This is consistent with prior evidence (e.g. Rosa et al., 2023) showing that tailored oral presentation training produces measurable improvements in performance. The practical implication is that higher education institutions can design more impactful interventions that not only build competence but also equip students with confidence and motivation to communicate effectively in diverse academic and professional contexts.

5.5 Limitations of the Study

The findings of this study are subject to several limitations that must be acknowledged. First, the findings are generalisable to respondents' experiences of oral presentations within the context of English proficiency courses. These courses formed the sampling frame because oral presentations were a major component of assessment. However, it is possible that when responding to the survey, some respondents may have drawn on their experiences on giving presentations in core disciplinary subjects, which may involve different expectations and assessment practices. To guide students' responses, the invitation emails and cover page of the survey made it clear that the students were selected because they were enrolled in the identified proficiency courses. Nevertheless, the possibility that some responses may be influenced by broader presentation experiences cannot be entirely ruled out and is acknowledged as a limitation.

A further limitation relates to the scope of the proposed conceptual model. The present study was designed to examine the psychological factors of oral presentation competence based on Self-Determination Theory. Consequently, the proposed COMPASS Model focused on perceived autonomy support, feedback literacy, grit, and intrinsic motivation, without incorporating language-related variables. This decision was consistent with the purpose of the study, which sought to explain oral presentation competence from a psychological perspective. Nevertheless, oral presentation competence is likely to be influenced by both psychological and linguistic factors. Therefore, the findings should be interpreted within the scope of the psychological constructs examined in this study, while recognising that future research may extend the proposed model by integrating relevant language-related variables to provide a broader understanding of oral presentation competence.

Third, this study relied on self-reported data collected through a structured close-ended questionnaire. Self-report instruments are vulnerable to social desirability bias, which refers to the tendency for respondents to give favourable responses rather than those that accurately reflect their feelings (Grimm, 2010b; Teh et al., 2023). This concern is particularly relevant since the study examined psychological constructs and oral presentation competence, where there is a possibility that some responses may have been influenced by the desire to present oneself positively (Lavidas et al., 2022). Although this risk cannot be fully eliminated (Podsakoff et al., 2003), several steps were

taken to minimise it. The questionnaire underwent expert review to ensure items were clear and neutral. Also, pre-testing with students was conducted to confirm comprehensibility. In addition, the cover page of the Google Form survey emphasised anonymity and confidentiality to encourage honest responses.

Respondent fatigue in this study must also be recognised as a limitation. Jeong et al. (2022) noted that lengthy surveys may cause respondents to skip questions and provide uniform response. Ghafourifard (2024) further identified two types of respondent fatigue. The first occurs when respondents lose interest and motivation to complete the survey. In line with ethical practices, this study recognised the possibility of such fatigue and allowed respondents to freedom to withdraw at any time, as stated in the email sent out to the respondents and the cover page of the Google Form. The second type arises when respondents skip questions or repeatedly select the same option. To reduce this risk, the instrument underwent expert review and pre-testing with students to ensure that items were clear, concise, and easily understood. In addition, all questions were set as compulsory in Google Form to avoid respondents from unintentionally skipping any survey items. Data cleaning procedures were also conducted to identify patterned responses to prevent outliers. Although these measures helped minimise the risk of respondent fatigue, the possibility cannot be ruled out entirely and is acknowledged as a limitation of this study.

Overall, these limitations do not diminish the significance of the findings. They define the scope within which the results should be interpreted and underline the steps taken to ensure rigour. These limitations also suggest important directions for future research, which are addressed in the next section.

5.6 Recommendations for Future Studies

Building on the limitations outlined in the preceding section, this study puts forward several recommendations to guide future research on oral presentation competence. First, to address the bounded context of this study, future studies should aim to enhance generalisability by examining the COMPASS model to different groups such as among postgraduate students. This specific population may display different levels of perceived autonomy support due to the dynamics of supervisor–supervisee relationships. In addition, postgraduate students are often required to deliver proposal defenses and viva voce presentations, which may demand higher levels of grit, feedback

literacy, and intrinsic motivation, as well as a broader set of oral presentation competencies.

Second, future research is encouraged to extend the COMPASS Model by examining the full serial indirect effect from perceived autonomy support to oral presentation competence through feedback literacy, grit, and intrinsic motivation. While the present study established significant direct relationships across the proposed model and examined three theoretically grounded mediating relationships, these mediation pathways were analysed independently in accordance with the predefined research objectives and hypotheses. These findings will assist future studies to examine the complete sequential mediation pathway within a single structural model to determine whether the cumulative indirect effect fully explains how perceived autonomy support contributes to students' oral presentation competence. Such an investigation would provide a more comprehensive evaluation of the proposed model and further strengthen its explanatory power.

Third, to move beyond reliance on self-report data alone, researchers are encouraged to extend the model by examining the moderating effects of demographic variables on the relationships in the COMPASS model. Demographic factors such as gender, academic background, prior presentation experience are recommended to be examined using moderation analysis in SEM. Studies such as Loureiro (2020) have reported mean differences in oral presentation competence between male and female students, but moderation analysis would allow for a more comprehensive understanding of “when” and “for whom” these relationships hold (MacKinnon & Luecken, 2008; Memon et al., 2019).

Future research is also recommended to interview a larger number of hiring managers from a wider range of professional sectors than those involved in the preliminary stage of this study. This would provide a richer understanding of the subskills valued in oral presentation competence without having to rely entirely on respondents’ responses. The interview data could then be analysed using Importance-Performance Analysis (IPA). This analysis determines the importance placed on specific competencies and compare these with actual student performance in the labour market (Richardt et al., 2024). This approach may help to refine the Oral Presentation Competence Inventory (OPCI) developed in this study and reduce the expectation gap between employers and universities.

In summary, these recommendations suggest different avenues for advancing research on oral presentation competence. By extending the COMPASS model and refining the Oral Presentation Competence Inventory (OPCI) developed in this study, future research can build on the present findings to generate a more comprehensive, contextually grounded, and practically relevant framework.

5.7 Conclusion

This thesis sets out to investigate the psychological factors that shape Malaysian undergraduates' oral presentation competence, with a focus on perceived autonomy support, feedback literacy, grit, and intrinsic motivation. Guided by self-determination theory, the study examined both the direct and mediated pathways through which these factors influence performance. Two research objectives framed the inquiry: to assess the direct effects of psychological factors on oral presentation competence, and to determine the mediating roles of feedback literacy, grit, and intrinsic motivation in these relationships.

The findings confirmed that psychological constructs play a central role in oral presentation performance. Perceived autonomy support, feedback literacy, grit, and intrinsic motivation emerged as significant factors, with results showing both direct and indirect effects. Mediation analyses provided additional insight by revealing the mechanisms that translate feedback literacy and grit into internalised motivation, leading to enhanced oral presentation competence. The validated COMPASS model, which accounted for 53% of the variance in oral presentation competence, demonstrates that oral presentation outcomes can be systematically explained through psychological pathways. This integrative framework advances the study of performance-based learning by shifting attention from narrow linguistic or delivery-focused perspectives to a more holistic account of how students' psychological readiness underpins effective oral communication.

Beyond these findings, the thesis makes distinct contributions. Theoretically, it extends knowledge by positioning psychological factors as core determinants of oral presentation competence, clarifying their direct and mediating roles, and proposing a validated model for future research. Methodologically, it contributes through its rigorous multi-stage design, including preliminary qualitative exploration, the development and validation of the Oral Presentation Competence Inventory (OPCI),

and the use of structural equation modelling to test complex pathways. Practically, it provides actionable insights for educators, institutions, and employers by offering evidence-based tools and strategies to foster oral presentation competence in diverse contexts.

While the study makes these contributions, it is not without limitations. Its focus on a single institutional context constrains generalisability, and reliance on self-reported measures introduces the possibility of response bias. These limitations, however, also create avenues for future inquiry. Further studies can test the COMPASS model across different cultural and institutional settings, employ longitudinal or experimental designs to strengthen causal claims, and expand the operationalisation of oral presentation competence to include performance-based measures alongside self-reports.

In conclusion, this thesis argues that oral presentation competence cannot be adequately explained by linguistic proficiency or technical skills alone. Instead, it is fundamentally shaped by psychological factors that determine students' motivation, resilience, and capacity to engage with audiences. By integrating autonomy support, feedback literacy, grit, and intrinsic motivation into a validated model, this study establishes psychological readiness as an equally critical dimension of oral presentation competence. It is hoped that this work not only informs theory and practice but also inspires future research to continue advancing a more holistic understanding of communication competence in higher education to ensure undergraduates are better prepared for the communicative demands of the labour market and narrow the persistent expectation gap between employers and graduates in communication skills.

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APPENDICES

APPENDIX 1
DATABASE SEARCH STRATEGIES AND STRINGS FOR HYPOTHESES DEVELOPMENT

Search Strings Used in Scopus and Web of Science

Construct	Scopus	Web of Science
Hypothesis 1 Perceived Autonomy Support -> Feedback Literacy	TITLE-ABS-KEY("autonomy support" OR "perceived autonomy support") AND TITLE-ABS-KEY("feedback literacy" OR "feedback engagement")	TS=("autonomy support" OR "perceived autonomy support") AND TS=("feedback literacy" OR "feedback engagement")
Hypothesis 2 Feedback Literacy -> Grit	TITLE-ABS-KEY("feedback literacy" OR "feedback engagement") AND TITLE-ABS-KEY("grit" OR "perseverance")	TS=("feedback literacy" OR "feedback engagement") AND TS=("grit" OR "perseverance")
Hypothesis 3 Girt -> Intrinsic Motivation	TITLE-ABS-KEY("grit" OR "perseverance") AND TITLE-ABS-KEY("intrinsic motivation" OR "self-determined motivation")	TS=("grit" OR "perseverance") AND TS=("intrinsic motivation" OR "self-determined motivation")
Hypothesis 4 Intrinsic Motivation -> Oral Presentation Competence	TITLE-ABS-KEY("intrinsic motivation" OR "internal motivation") AND TITLE-ABS-KEY("oral presentation competence" OR "presentation skills" OR "public speaking performance")	TS=("intrinsic motivation" OR "internal motivation") AND TS=("oral presentation competence" OR "presentation skills" OR "public speaking performance")
Hypothesis 5 Mediation of Feedback Literacy between Perceived Autonomy Support and Grit	TITLE-ABS-KEY("autonomy support" OR "perceived autonomy support") AND TITLE-ABS-KEY("feedback literacy" OR "feedback engagement") AND TITLE-ABS-KEY("grit" OR "perseverance") AND TITLE-ABS-KEY("mediation" OR "mediating	TS=("autonomy support" OR "perceived autonomy support") AND TS=("feedback literacy" OR "feedback engagement") AND TS=("grit" OR "perseverance") AND TS=("mediation" OR "mediating role")

	role")	
Hypothesis 6 Mediation of Grit between Feedback Literacy and Intrinsic Motivation	TITLE-ABS-KEY("feedback literacy" OR "feedback engagement") AND TITLE-ABS-KEY("grit" OR "perseverance") AND TITLE-ABS-KEY("intrinsic motivation") AND TITLE-ABS-KEY("mediation" OR "mediating role")	TS=("feedback literacy" OR "feedback engagement") AND TS=("grit" OR "perseverance") AND TS=("intrinsic motivation") AND TS=("mediation" OR "mediating role")
Hypothesis 7 Mediation of Intrinsic Motivation between Grit and Oral Presentation Competence	TITLE-ABS-KEY("grit" OR "perseverance") AND TITLE-ABS-KEY("intrinsic motivation") AND TITLE-ABS-KEY("oral presentation competence" OR "presentation skills") AND TITLE-ABS-KEY("mediation" OR "mediating role")	TS=("grit" OR "perseverance") AND TS=("intrinsic motivation") AND TS=("oral presentation competence" OR "presentation skills") AND TS=("mediation" OR "mediating role")

Search Strings Used in ScienceDirect

Hypothesis	**Search Structure**
Hypothesis 1: Perceived Autonomy Support -> Feedback Literacy	("autonomy support" OR "perceived autonomy support") AND ("feedback literacy" OR "feedback engagement")
Hypothesis 2 Feedback Literacy -> Grit	("feedback literacy" OR "feedback engagement") AND ("grit" OR "perseverance")
Hypothesis 3 Girt -> Intrinsic Motivation	("grit" OR "perseverance") AND ("intrinsic motivation" OR "self-determined motivation")
Hypothesis 4 Intrinsic Motivation -> Oral Presentation Competence	("intrinsic motivation" OR "internal motivation") AND ("oral presentation competence" OR "presentation skills" OR "public speaking performance")
Hypothesis 5	("autonomy support" OR "perceived autonomy support") AND ("feedback literacy" OR "feedback engagement")

Mediation of Feedback Literacy between Perceived Autonomy Support and Grit	AND ("grit" OR "perseverance") AND ("mediation" OR "mediating role")
Hypothesis 6 Mediation of Grit between Feedback Literacy and Intrinsic Motivation	("feedback literacy" OR "feedback engagement") AND ("grit" OR "perseverance") AND ("intrinsic motivation") AND ("mediation" OR "mediating role")
Hypothesis 7 Mediation of Intrinsic Motivation between Grit and Oral Presentation Competence	("grit" OR "perseverance") AND ("intrinsic motivation") AND ("oral presentation competence" OR "presentation skills") AND ("mediation" OR "mediating role")

APPENDIX 2

COURSE LEARNING OUTCOMES AND ASSESSMENT WEIGHTAGE

No	Course Code	Course Name and Code	Course Learning Outcomes (CLO)	Skill-Based Assessment (Oral Presentations)	Cumulative Weightage of Assessment (Oral Presentations)
1	ELC590	English for Oral Presentations	i) Demonstrate the ability to verbally present informative speeches. ii) Demonstrate the ability to verbally present idea pitching and persuasive speeches. iii) Display appropriate values and attitudes when presenting informative and persuasive speeches.	i) Informative Speech (35%) ii) Pitching (20%) iii) Persuasive Speech (45%)	100%
2	LCC400	English for Informative Speech	iv) Demonstrate verbally significant information in informative speeches related to academic or occupational matters v) Present verbally a clear, prepared informative speech related to academic or occupational matters.	i) Informative Speech 1 (30%) ii) Informative Speech 2 (40%)	70%

No	Course Code	Course Name and Code	Course Learning Outcomes (CLO)	Skill-Based Assessment (Oral Presentations)	Cumulative Weightage of Assessment (Oral Presentations)
3	LCC402	English for Oral Reporting	i) Describe verbally and in writing detailed information reliably from diagrams. ii) Demonstrate verbally and in writing clear and detailed information related to procedures and findings of a field report.	i) Charts/Graphs Presentation (40%) ii) Field Report Presentation (40%)	80%
4	LCC600	English for Persuasion	i) Demonstrate the ability to reflect on the language and delivery of informative speeches. ii) Integrate written and verbal communication skills in preparing and presenting informative speeches.	iii) Pitching (35%) iv) Persuasive Speech (45%)	80%

APPENDIX 3

ETHICS APPROVAL LETTER

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UNIVERSITI TEKNOLOGI MARA

Pejabat
Timbalan Naib Canselor
(Penyelidikan dan Inovasi)

Reference : 600-TNCPI(5/1/6)
Our reference : REC/03/2022 (PG/MR/40)
Date : 16 March 2022

Assoc. Prof. Dr Nor Shidrah Mat Daud
(Nadia binti Anuar - 2020487464)
Akademi Pengajian Bahasa
Universiti Teknologi MARA
40450 Shah Alam,
SELANGOR

Dear Assoc. Prof. Dr Nor Shidrah,

APPROVAL LETTER - UiTM RESEARCH ETHICS COMMITTEE

Thank you for submitting your research proposal to the Research Ethics Committee (REC). After considering your application, the Committee approved your proposal titled "Modeling the Factors Influencing Students' Oral Presentation Performance" at Akademi Pengajian Bahasa, UiTM Shah Alam.

Details of the approval are as follows:

Ref. number:	REC/03/2022 (PG/MR/40)
Approval Period:	16 March 2022 until 31 October 2024
Authorised personnel:	1. Assoc. Prof. Dr Nor Shidrah Mat Daud 2. Nadia binti Anuar

The UiTM Research Ethics Committee operates in accordance to the ICH Good Clinical Practice Guidelines, Malaysian Good Clinical Practice Guidelines and the Declaration of Helsinki. The approval of this project is conditional upon your continuing compliance with these guidelines and declaration.

We draw to your attention the requirement that a report on this research, must be submitted every 12 months from the date of the approval or on the completion of the project, whichever occurs first. Failure to submit reports will result in withdrawal of consent for the project to proceed. Amendments, if any, to the study documents are to be submitted to the REC for approval.

If you require further information, please contact the REC Secretariat at 03-55448069/03-55442794 or email at recsecretariat@uitm.edu.my.

Yours sincerely,

PROFESSOR EMERITUS DATO' DR RAYMOND AZMAN ALI
Chairman
UiTM Research Ethics Committee

c.c.: Dean, Akademi Pengajian Bahasa, UiTM

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ISO 9001:2015 No. Sijil: 10.2016

UiTM di hatiku

APPENDIX 4
TRANSCRIPT OF PRELIMINARY INTERVIEW WITH HIRING MANAGER 4

INTERVIEWER : Assalamulaikum, before I start the interview, can you introduce yourself?

INTERVIEWEE : Waalaikummusalam, my name is Abdulalim Zakaria. I'm a specialist in Human Resource area. I used to be generalist when I first started working in 1985 but I've been exposed to all aspect of Human Resource functions which also involved interviewing candidates for the position within the organisation. I think for the last 15 to 18 years, I specialise in Industrial Relations so until today I worked in local bank as the Executive Vice President and Head of the Industrial Relations. This department comprise industrial instructions, data and analytics, performance management and safety and health. We look at the compliance aspect for Human Resource.

INTERVIEWER : I see. You have a very long work experience?

INTERVIEWEE : Yes. Next week on the 16th, I'll be celebrating my 36 years of working experience.

INTERVIEWER : 36 years. That's a very long experience. Throughout the whole 36 years of experience, do you spend all of the time interviewing candidates to be employed in your company?

INTERVIEWEE : Not really. During the start of my career, yes I did because I was a generalist but when I stopped when I move to specialist in Industrial Relations. However, I still do interview candidates for special positions because last year I was the Chief of Human Resource for the bank that I'm currently

working for. In that positions, I was involved with various interviews for senior positions for the bank. Occasionally, I get involved with the selection of committee for the management training program.

INTERVIEWER : Alright. In your opinion based on your interview experiences, what do you understand from oral communication?

INTERVIEWEE : When we talk about fresh graduates and also management training program, we look at their ability to express themselves. Whether right or wrong, it's another issue but the ability and confidence level that they display whenever they do a presentation. That is usually what we observe and we judge them. Nowadays, working in a challenging environment, you need people to express their thoughts. They might be good at their academic results but if they can't express their feelings and thoughts well then it's going to be very difficult them to communicate with other parties. We do look into this aspect as it is one of the important area when we assessed candidates.

INTERVIEWER : When you say you look at how their express themselves, do you look at their level of English proficiency or do you look at how articulate the candidates is in expressing their understanding on the a certain issue or topic?

INTERVIEWEE : Actually it goes together because during the interview we will give them a topic to discuss or we allow them some freedom. I mean the topic is there but it's a guide for them to share their thoughts on that topic. When the medium of communication is in English, the ability to express themselves in English is very important. Some of the candidates will realised that they tried very hard and they have something in their mind but the problem is when they think in their native language and they try to translate it to

English when they are expressing their thoughts, there you can see some kind of misunderstanding.

INTERVIEWER : When you say there's an awkwardness in their translation from their native language to English, does that affect their opportunities?

INTERVIEWEE : If we are talking about the fresh graduates, no not really. Firstly when we have a list of candidates that comes from local university, private university and also overseas candidates. Obviously you can tell the difference the ability to speak between the overseas graduates and local graduates. The medium of communication for overseas graduates are in English and they are used to it. But when you put local university graduate and overseas graduate together and you ask them to talk about the topic that is given, sometimes you can see that the local graduate speak better and outperform the overseas graduate. You might ask why? It is because all local university use English as the medium to give instructions. You can see that their level of English has improved a lot tremendously and some of the IPTAs are no longer the last choice for the graduates to join. They carry a good level of intellectual, their ability to converse in English and they are able to share and present their ideas well. I could see that when we do management training program, the minimum qualification is 2nd class upper but of course we prefer 1st class. We can see that they are really good and they can present themselves well. Some of them are really better and good than overseas graduates. Of course there's pros and cons and the overseas graduates has the chance to live independently in a develop country so their view on certain topics are more well educated.

INTERVIEWER : If you have to measure the local students about their oral communication skills, on the scale of 1-10. One being very

bad and ten being very good, how would you rate?

INTERVIEWEE : Can I qualify them according to their qualifications?

INTERVIEWER : Definitely go ahead.

INTERVIEWEE : 2nd class upper and 1st class, I would say their level is at 8. Some of 2nd class lower, I would the say that their level is around 6. The maximum level for them would be 6 but some could be worst than that.

INTERVIEWER : Alright. When I see the reports, they said that some graduates have a hard time communicating and presenting themselves. The expectation for the graduates doesn't align with the employers' expectation. What is your opinion on it? Is it true or is it a myth?

INTERVIEWEE : I've also read some reports and opinions written by employers saying that university are producing graduates who are good at academics but not good at communications skills. The companies have to be fair to the undergraduates as well. Those interviewers has been in the organisations for about some time and they are have been doing their job for perhaps 10-15 years. Their benchmark is their level and they would expect the graduates to be just like them instantly during the interview. It would be not fair for the graduates because they just started their career and exposing themselves to the working world. They may not comprehend the issue at the spot and at the same time to express themselves well. But the employers need to do is that to balance their expectation and the ability of the student. Because the students, they are so engrossed in their curriculum activities. In some cases, local university gives everything to the undergraduates so that they become more equipped in the working life. The employers may not need all of subjects that you learn in the university. The employers wants to know if you know your areas. For

example, if you are from Human Resource, you need to know what does Human Resource do and more. As long as you have qualification, the ability to communicate compliments the requirement. As I said earlier, the organisation have to be fair to the student. The organisation is the decision making from various institution of higher learning.

INTERVIEWER : That's a very good point and I never thought that unrealistic expectation will also contribute to the high employment rate. Do you think it applies to graduates oral presentation skills as well?

INTERVIEWEE : Yup. The ability to communicate, speak well and express your thoughts will give you more points as to compare to people who struggle to share their thoughts and idea. When employers interview, they tend to go with people who can speak better because they don't want to waste time on people who struggle with speaking up. Even if we hire people that struggle with speaking, we will have a difficult time with training and coaching them. If we give them difficult task and they don't catch the grasp of it, we will not get the desired result. If we are looking at people who is good at communication, they are able to understand the concept well and will produce better result. That is human nature. We are more attracted to things that is better compared to the other parties. If you look at my earlier statement, the employer will have to be fair to the graduates because the graduates may not understand the current issues and topics. For example, during my selection meeting for the management training committee, we had various stages. Number one, we group 6 graduates together and they were given a topic to talk about on the stage and do public speaking. Each of them were given 2-3 minutes to share the thoughts and you can see people were competing. Even though they are from the same group and delivering the

same topic but they are competing because we mentioned that speaker #2 can't repeat what speaker #1 said. Everybody try to become speaker #1 because they are afraid that their ideas will be stolen from other speakers. Next, we have the written test. They are given a topic and they have to write something about it. Last but not least, the interview of 5 people. We will have 5 people in one interview session and we will see their ability to speak up. The candidates do not need to wait for their turn to speak up, all they need to do is just raise up their hand and speak up. Candidates who take the time to think before speaking up, they will be left behind.

INTERVIEWER : I see. I understand. So spontaneous mind also matters?

INTERVIEWEE : Yes yes. Spontaneous mind is able to come when they are able to grasp the situation and you are able to speak up your mind.

INTERVIEWER : Understood. Other than the items that you mentioned earlier, what factors do you think that contributes to students' presentation skills? It can be culture factors.

INTERVIEWEE : Yes yes. I realised that this is happening because we do some benchmark studies. As I said earlier on, we have people coming from overseas and local university. Local university is either IPTA or IPTS. We also look at whether this candidate come for boarding school or normal daily school. You could see the difference between them. If candidates coming from schools and university at Petaling Jaya and Kuala Lumpur, their exposure would be better than people from the rural areas. Students from rural areas are put at the boarding school, they are exposed to a lot of things. They can even outshine people who comes from city background. So we look into various angles.

INTERVIEWER : I see. So you do background check. Background check that involves the area that they grow up, the quality of education and more. So you really look into them before hiring them?

INTERVIEWEE : Yes we do. When we recruited a group of 40 people, we do not want people like 'Starbucks Culture'. I'm sorry for using this term but it's the term that we use. Those kinds of people only talk without thinking. You know people at Starbucks will spend hours and hours there talking. They think that they are born leaders and everyone must respect them as a leader and everyone should follow their instruction. No it doesn't work that way. We want to give opportunities for all and when we assess the candidates we would see if the 'Starbucks' leader fit into a team because the culture in the organisation that I'm currently working for, we go for team high performance culture. It's a team not an individual. If you talk like a politician, maybe this team doesn't fit into organisation culture. We also look into that.

INTERVIEWER : So let me rephrase that, being able to be a team player and fitting into the organisation culture contributes to their presentation skills. When they are comfortable with the organisation culture, then they become better presenter. Is that what you meant?

INTERVIEWEE : Correct.

INTERVIEWER : This is my first time hearing about the Starbucks Culture. Is this a real thing or is it just based on Affin Bank?

INTERVIEWEE : I'm not sure about that but I'm sure we created the term. You see when we assess them, there are people who comes to the interview wearing jackets, the tie not being tied properly and some people don't have necktie and we have to lend them ours. We do have candidates like that. But those who are

exposed to city life, they talk as if they know everything. Even though they are good academic wise and they have good oral communications skills but we will see if they would fit into a team. If they couldn't fit into a team, we will not take. We don't want individual performer. We want a team that can work together. If the team is good that means that the individuals are good as well and they form a good team.

INTERVIEWER : Okay I understand now. Do you think there's any self factors? For example, I've read a study where people who present fear comments. Do you think that affects their presentation performance?

INTERVIEWEE : If they have that kind of fear, of course it's tough for them to get through. The best thing for them is that when they set into the auditorium, they see the audiences and the atmosphere is very tense. Everybody is thinking that they are the best and that they are able to present well. This is my experience in a group of fifty, you can see one or two candidates leaving the auditorium even before we start anything. They already have that mindset where they think that might not able to make through. Another thing is that when candidates are on stage. When we ask them to present something on stage and when they are open Question and Answer session, they freak out. They are struggling to answer. You can see people who can speak well will come forward to assist the candidates who is struggling. You can see how hard they try to catch the attention of the interviewers.

INTERVIEWER : Okay good. The good understanding of the issue and good communication skills equals to confidence which motivate candidates to speak up. Is that what you mean?

INTERVIEWEE : Yes. Correct

INTERVIEWER : I think I have gotten all the information that I wanted. Thank you so much.

INTERVIEWEE : You are most welcome. Can I add something?

INTERVIEWER : Sure go ahead.

INTERVIEWEE : I also said in Jawatankuasa Mengkaji Curriculum masters in HRM in UiTM. There was a number of industry experts were invited and sit in the jawatan kuasa meeting and UiTM asked for our opinion whether this one should be in or this one should be out. The subject and topic. We provide our views in that matter. There are certain things when university propose, we feel that it is slightly burdening the students. In the real working life, those who want to be in Human Resource area, it's nice to learn certain subjects but it's not a mandatory to become an expert. We propose that some topic should be combine to become a big topic instead of standing by itself. There are also certain topics that shouldn't be taught university because it's a waste of time and it will burden the students. We come from the industry and we share what do we actually want. For example, for HRM students, they need to be good at certain things in HR. Number one, talent management. It is the 'It' thing nowadays because if you are have a proper talent management system, you will be able to build a talent within the organisation. It is not like other companies where if there's any vacancy, they will start to recruit people from outside. When you start recruiting people from outside, yes you get an instant experience candidate but demoralised the existing employees. So if you are good at talent management, you will address this issue. Another one is compassion and benefits. Nowadays, it's not like I pay you fresh graduates for RM3500 that's it. Now we have to look into flexi benefit. We have proposed to UiTM and I believe that they are take it into considerations for the next opening

of program.

INTERVIEWER : That's a very good point. When they are teaching unnecessary things, it confuses the students on what needs to be focus on. I think that is also one of the factor that contributes good oral communication skills because in the end it comes back to their knowledge.

INTERVIEWEE : Do you know that I work part time as UiTM lecturer?

INTERVIEWER : Yes I do.

INTERVIEWEE : I could see that when people do Masters program, they come from various background. There are graduates that come from Faculty of Music, people from communications background and some comes from business studies background. When you have this kind of people and when you put them together in a program, you can't expect to be spoonfed by your lecturers. You have to think by yourselves and you have to do your own research. However they don't have the basic knowledge in HRM and it's very hard for them to participate in the class discussion. They will have some difficulties in understanding.

INTERVIEWER : That's very good point. Thank you so much.

INTERVIEWEE : No problem.

APPENDIX 5

EXPERT REVIEW VALIDATION FORM FOR ORAL PRESENTATION COMPETENCE INVENTORY (OPCI)

Akademi Pengajian Bahasa, Universiti Teknologi MARA	**Validation of Pre-Test Questionnaire**
Modeling the Influential Factors of Undergraduates' Motivation for Oral Presentations	

Research Team	
PhD Candidate	Nadia Anuar
Main Supervisor	Assoc. Prof. Dr. Nor Shidrah Mat Daud
Faculty	Academy of Language Studies, UiTM Shah Alam

Dear Professor / Associate Professor / Mr / Mrs / Miss

The primary objective of my PhD research project is to model the factors that influence undergraduates' motivation to participate in oral presentations. Thus,I have prepared an instrument adapted from previous studies to measure the constructs (factors) of interest.

I would like to ask for your kind assistance in validating and reviewing the questionnaire items for the actual data collection. Please respond to this exercise by indicating the extent of your agreement to each item in the survey.

I would like to express my sincerest gratitude towards your contribution in my PhD research. Please contact me at should you require further clarification.

Nadia Anuar
(PhD Candidate)
Academy of Language Studies
University Teknologi MARA Shah Alam

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PART B: PERCEIVED AUTONOMY SUPPORT

Please tick the extent of your agreement to the item based on the scale below:

1	2	3	4	5
Not Important	**Slightly Important**	**Moderately Important**	**Important**	**Very Important**

Variable	Items		Please tick the extent of your agreement to the item by ticking one of the columns below.					Expert's Comments
			1	2	3	4	5	
PAS1	I am provided options for my oral presentation by my lecturer.	**Interval Scale** **1**: Strongly Disagree To **10**: Strongly Agree						I think you need to specify what qualiify as option
PAS2	I felt understood by my lecturer when I was preparing for oral presentations.							Some students may not understand what is meant by understood, suggest to simplify
PAS3	My lecturer conveys confidence in my ability to do well in my oral presentations.							
PAS4	My lecturer encourages me to ask questions.							
PAS5	My lecturer listens to how I would like to execute my oral presentations.							execute is not a B2 low word
PAS6	My lecturer tries to understand how I visualise my oral presentation before providing suggestions.							visualise - not clear (visualise delivering?

Please write your comments in the provided box below, if you have any.

OVERALL COMMENTS FOR THIS SECTION:	Since the questionnaire is target at LC400 and LC402 students from B2 low CEFR level, it would be helpful to check the cefr level of the words used in the items - to avoid confusion and misunderstanding, and for easy reading

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APPENDIX 6
EXPERT REVIEW COMMENTS FOR ORAL PRESENTATION COMPETENCE INVENTORY (OPCI)

Item Modification for Perceived Autonomy Support

No	Item Label	Original Item	Reason for Modification	Revised Item
1	PAS1	I am provided options for my oral presentation by my lecturer.	The keyword "options" in this statement is vague.	I am provided with different ideas for my oral presentations by my lecturer.
2	PAS2	I felt understood by my lecturer when I was preparing for oral presentations.	The keyword "understood" may confuse respondents.	I felt that my lecturer understood my needs while I was preparing for my oral presentations
3	PAS3	My lecturer conveys confidence in my ability to do well in this course.	Need to revise the leading statement.	I feel confident in my oral presentations due to my lecturer's encouragement.
4	PAS4	My lecturer encourages me to ask questions.	Need to revise the leading statement.	I am encouraged by my lecturer to ask questions while preparing for my oral presentations.
5	PAS5	My lecturer listens to how I would like to execute my oral presentations.	Need to revise the leading statement.	I feel my lecturer values my preferences for conducting my oral presentations.
6	PAS6	My lecturer tries to understand how I visualise my oral presentation before providing suggestions.	Need to revise the leading statement.	I feel my lecturer considers my vision for my oral presentations before giving suggestions.

Item Modification for Feedback Literacy

No	Item Label	Original Item	Reason for Modification	Revised Item
1	FBL1	I reflect on the quality of my oral presentations after receiving feedback.	The use of verb, 'reflect' is overlaps with item FBL2.	I evaluate the quality of my oral presentations based on the feedback I receive.
2	FBL2	I use my reflection as a source of information to improve my oral presentations.	The word 'reflection' is inaccurate.	I self-reflect to make improvements to my oral presentations.
3	FBL3	I seek out examples of good work to improve my oral presentation.	The phrase "good work" is vague.	I look for high-quality examples to enhance my oral presentations.
4	FBL4	I listen or read thoughtfully when other people provide me with input about my oral presentations.	Double-barrelled item.	I carefully consider feedback from others about my oral presentations.
5	FBL5	I consider comments I have received on similar tasks when I am working on my oral presentations.	Item is too wordy.	I apply feedback from similar tasks to improve my oral presentations.
6	FBL7	I carefully consider comments about my presentations before deciding if I will use them or not.	Item is too wordy.	I review feedback on my presentations carefully to determine its usefulness.
7	FBL8	I determine which feedback I will use when receiving conflicting feedback about my oral presentations.	Item is too wordy.	I decide which feedback to use when I receive conflicting input about my oral presentations.
8	FBL10	I consider how comments relate to rubrics of the oral presentations.	The word 'rubrics' may potentially be difficult, and item is ambiguous.	I consider how feedback relates to the guidelines for my oral presentations.

9	FBL12	I use comments on my presentation to refine my understanding of what a good quality presentation looks like.	The word 'refine' may potentially be too difficult.	I use feedback on my presentation to better understand what makes a high-quality presentation.
10	FBL13	I plan how I will use them to improve my future presentations.	The pronoun "them" is ambiguous.	I plan how to use feedback to improve my future presentations.
11	FBL18	I take the initiative to refer to rubrics when commenting on other people's oral presentations.	The word 'rubrics' may potentially be difficult.	I refer to guidelines when commenting on others' oral presentations.
12	FBL19	I offer to provide feedback to my peers.	Item can be concise by eliminating the preposition 'to'.	I offer constructive feedback to my peers.
13	FBL22	I am open to reasonable criticism about my oral presentations.	The phrase 'constructive criticism' is too vague.	I welcome constructive criticism on my oral presentations.
14	FBL23	I deal well with any negative emotional responses I have to feedback information.	Item is too wordy.	I manage my emotional reactions to feedback effectively.
15	FBL24	When a feedback message is valuable but upsetting or annoying, I still find a way to make use of it.	Item is too wordy, and the leading statement needs to be revised.	I find ways to use feedback constructively even if it is negative.
16	FBL26	I fully utilise the feedback received even if it is negative.	The word "utilise" can potentially be a difficult word.	I utilise all feedback even though it may be negative.

Item Modification for Grit

No	Item Label	Original Item	Reason for Modification	Revised Item
1	GRT1	I work hard to learn English to improve my oral presentations.	The phrase 'work hard' is vague.	I consistently work on my English to improve my oral presentations.
2	GRT2	I put time and effort into improving my English language weaknesses to improve my oral presentations. .	Double-barrelled item.	I dedicate time to improving my English for my oral presentations.
3	GRT3	I am always interested to learn about oral presentations.	Item is wordy.	I consistently seek to learn more about oral presentations.
4	GRT4	I always ensure that I maintain my focus when learning about oral presentations.	Item is wordy.	I consistently stay focused when learning about oral presentations.
5	GRT5	I have many ideas that I will always add into my oral presentations.	Item does not fully reflect the construct.	I actively seek new ideas for my oral presentations.
6	GRT6	I often set a goal for my oral presentations.	The word "often" is not precise.	I always set goals for my oral presentations.
7	GRT7	I always ensure that I do not get distracted from my oral presentations.	Negative statement "do not" in the item.	I make sure to stay focused during my oral presentations.
8	GRT8	I move out of my comfort zone for my oral presentations.	The word 'move out' is inaccurate.	I challenge myself to step out of my comfort zone for my oral presentations.
9	GRT9	I take the initiative to construct new ideas for my oral presentations.	Item is too wordy, and 'construct' is not suitable.	I proactively develop new ideas for my oral presentations.
10	GRT13	I will not allow anything to stop my learning progress	Negative statement "do	I am determined to maintain my learning progress in oral

	of oral presentations.	not" in the item.	presentations

Item Modification for Intrinsic Motivation

No	Item Label	Original Item	Reason for Modification	Revised Item
1	IMT10	It was important for me to do well at oral presentations.	Item used past tense.	I find it important to do well in oral presentations.
2	IMT11	I conducted my oral presentations with self-assurance.	Item used past tense.	I conduct my oral presentations with self-assurance.
3	IMT12	I was relaxed in doing my oral presentations.	Item used past tense.	I feel a sense of calm when delivering my oral presentations.

Item Modification for Oral Presentation Competence

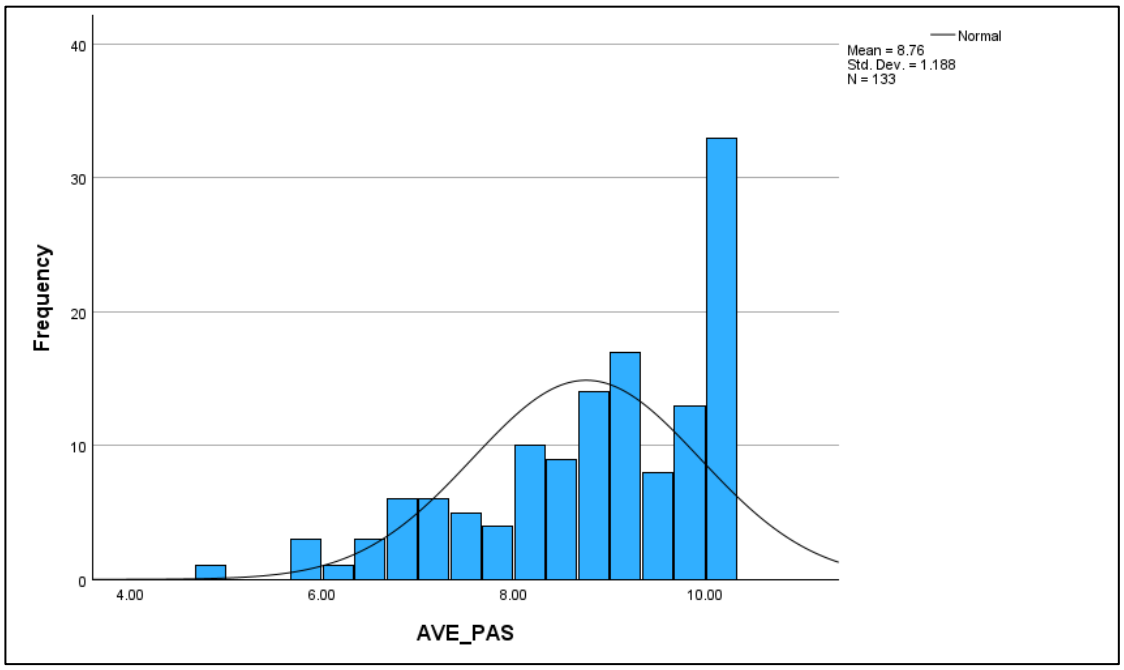
No	Item Label	Original Item	Reason for Modification	Revised Item
1	OPS1	I always ensure that the content of the presentations aligns with the topic.	The word 'align' may potentially be a difficult word.	I always ensure that the content of my presentations matches with the assigned topic.
2	OPS14	I can integrate technological tools for my oral presentations	The word 'integrate' may potentially be a difficult word.	I can use technological tools in my oral presentations.
3	OPS19	I make the effort to reduce any fillers during my oral presentations.	Respondents may not know what fillers are.	I make the effort to reduce fillers (uhm, ahh, hmm) during my oral presentations.
4	OPS21	I adhere to the time limit during my oral presentations.	The word 'adhere' may potentially be a difficult word.	I can follow the time given for my oral presentations.

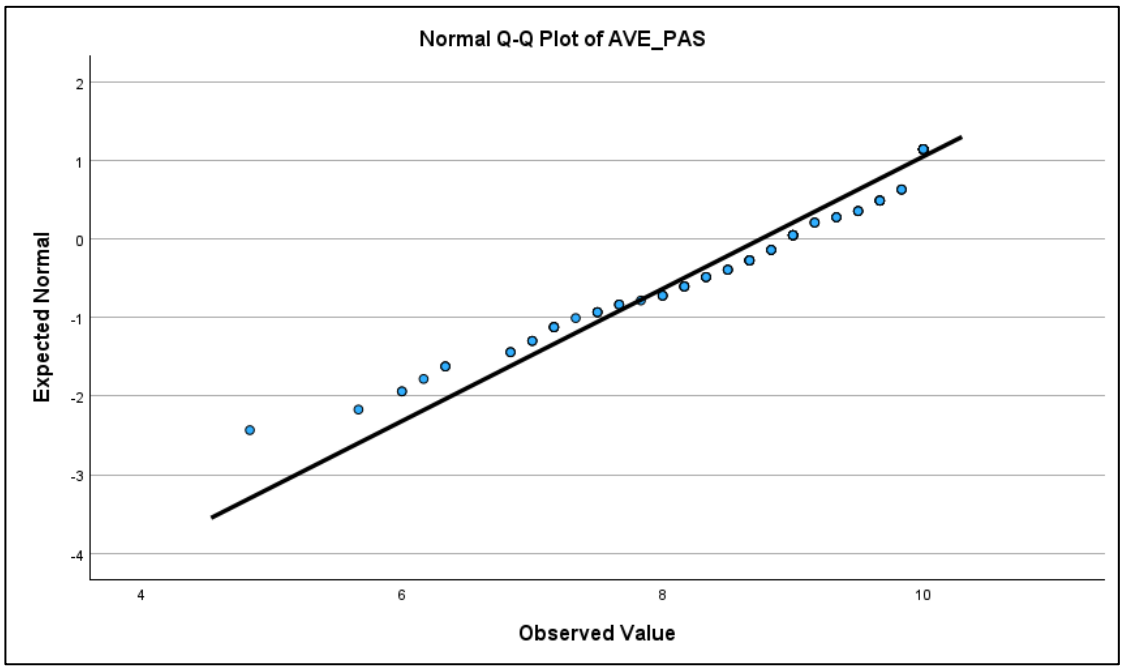
5	OPS24	I always research topics that may appeal to the audience for my oral presentations.	The words 'research' and 'apply' may potentially be difficult words.	I always search for topics that might interest my audience for my oral presentations.

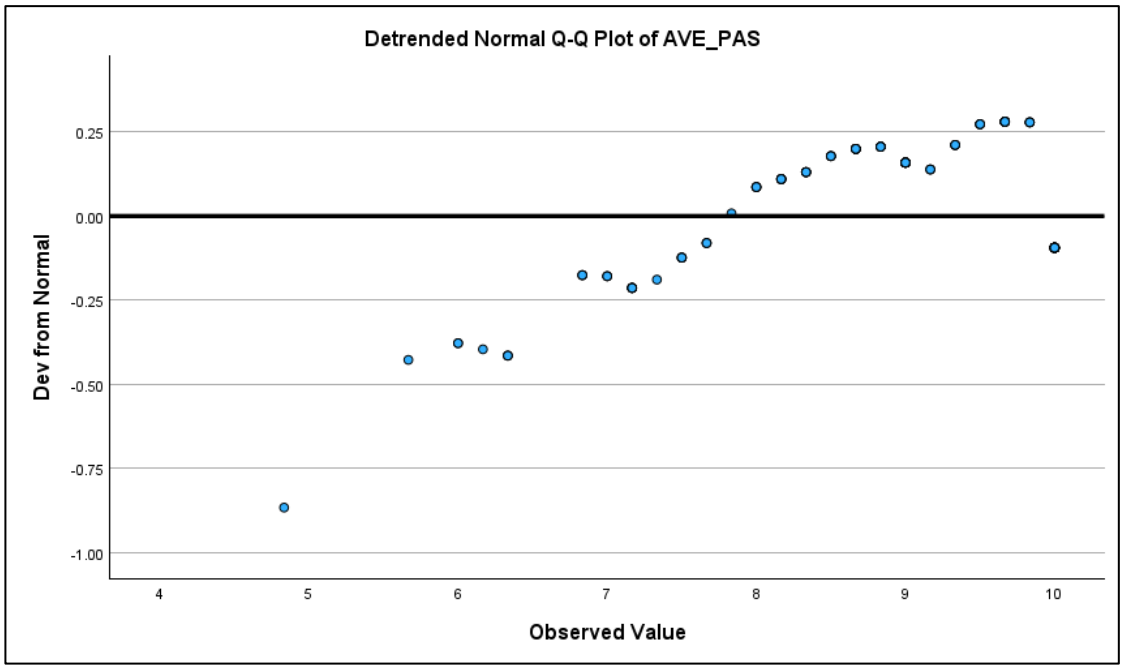
APPENDIX 7

HISTOGRAM, Q-Q PLOTS OF INDEPENDENT VARIABLES

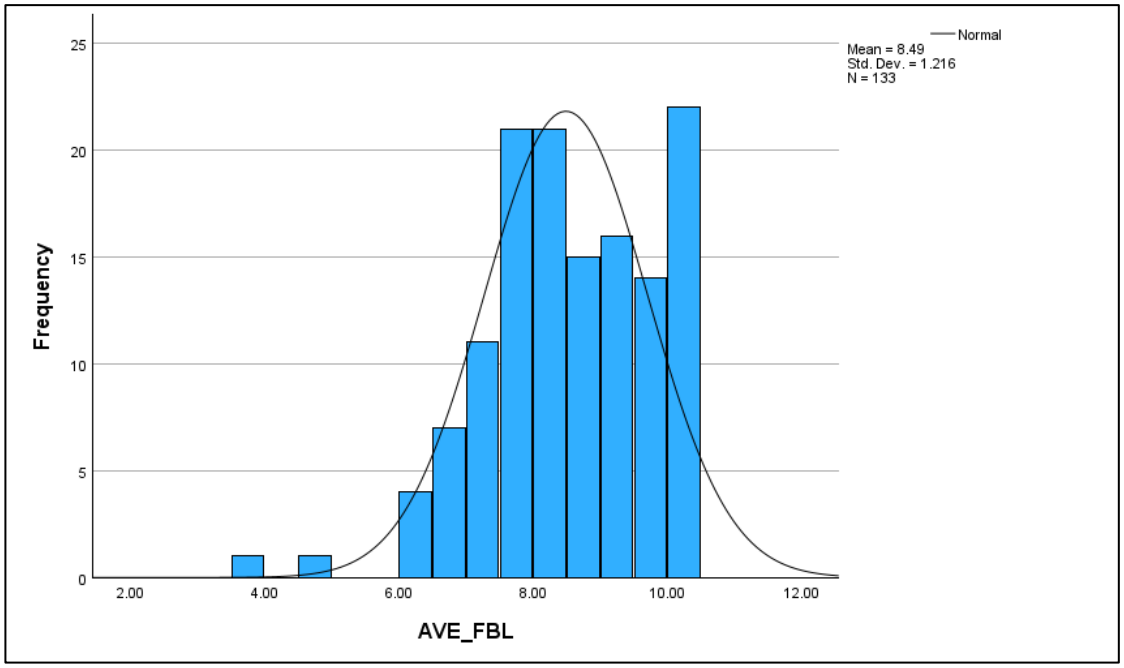
PERCEIVED AUTONOMY SUPPORT

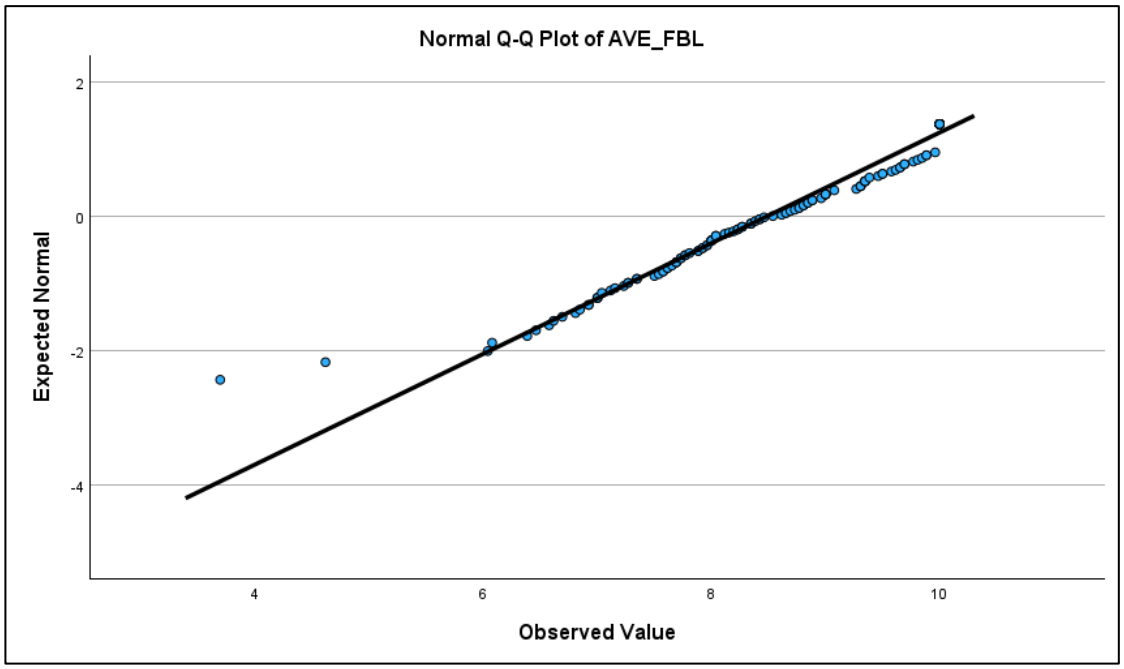


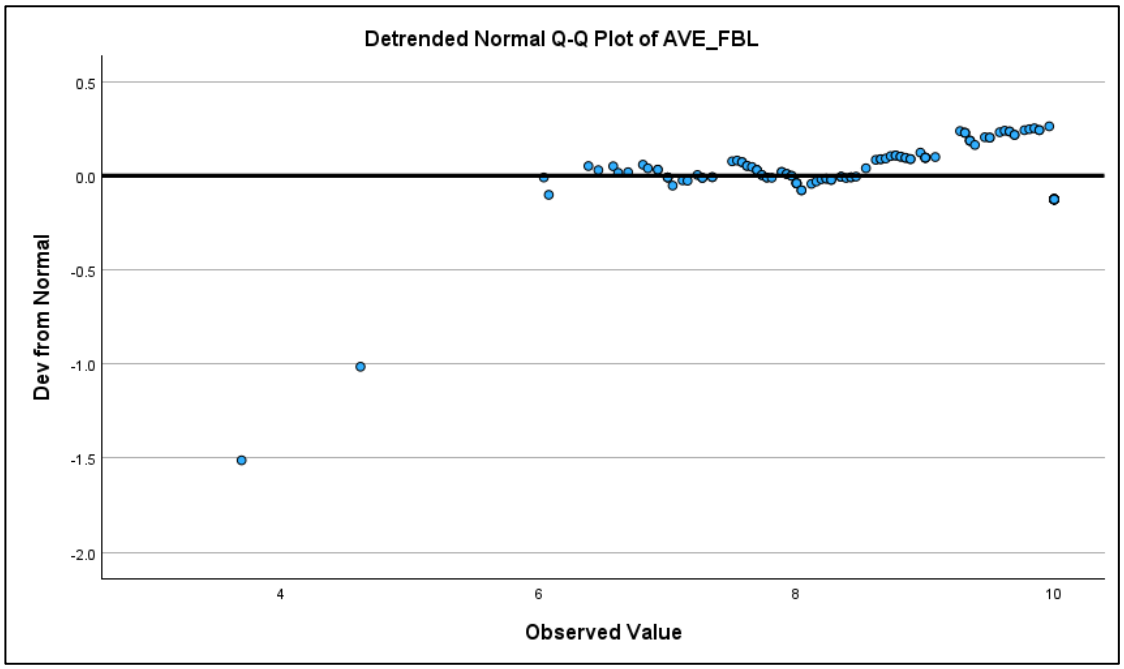




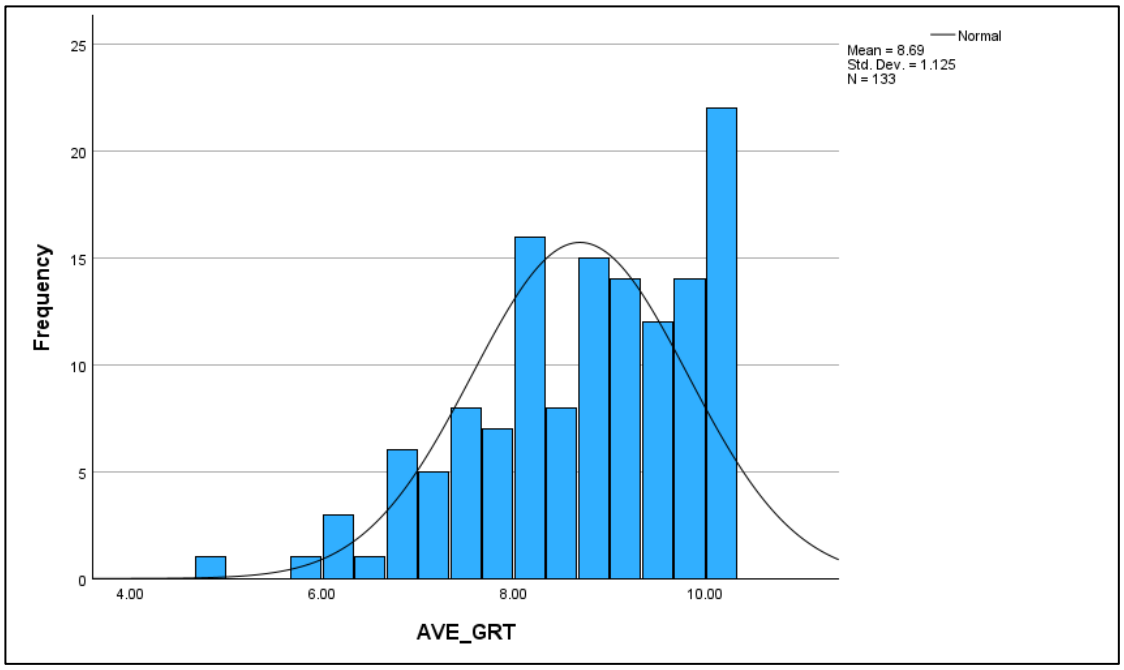
FEEDBACK LITERACY

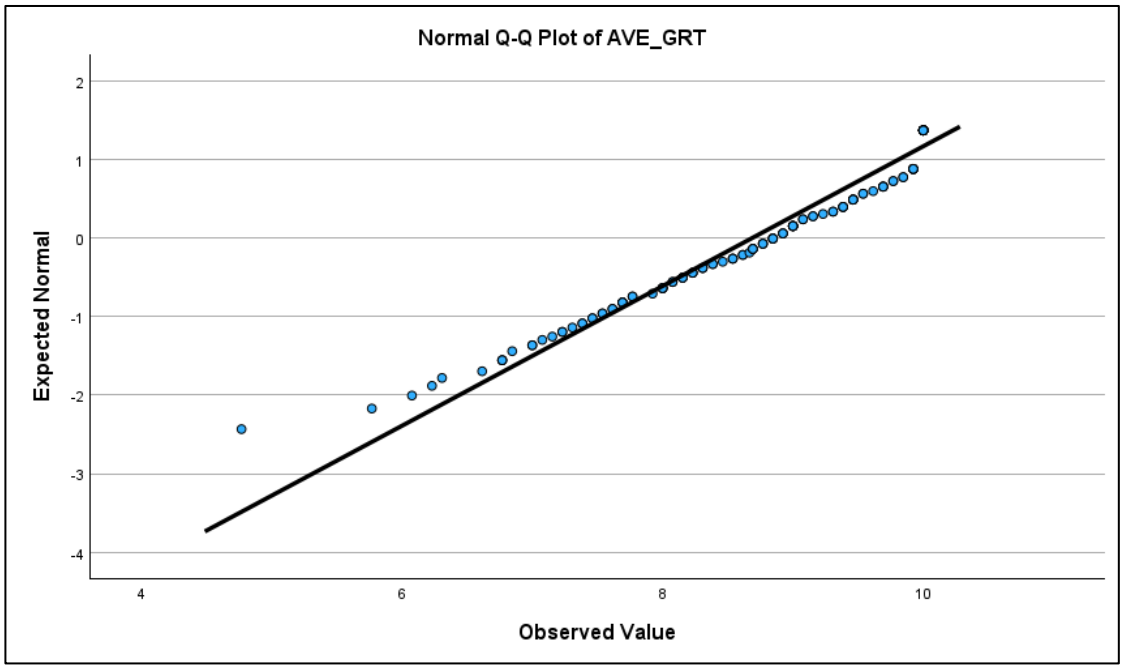


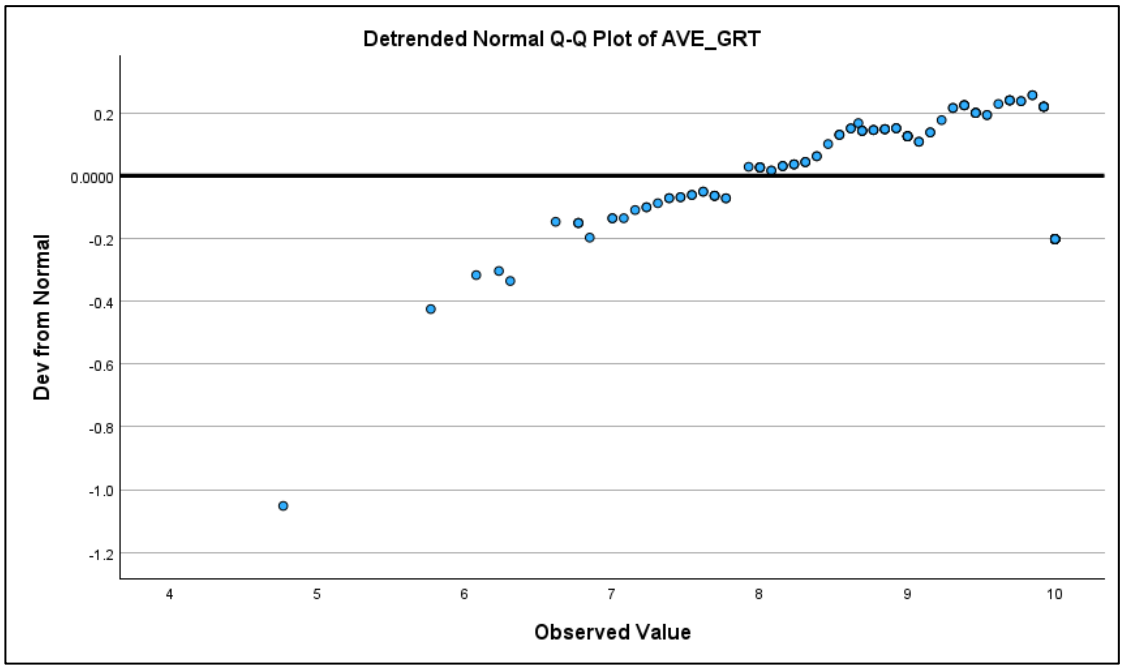

Normal Q-Q Plot of AVE_FBL
Expected Normal
2
0
-2
-4
4
6
8
10
Observed Value


Detrended Normal Q-Q Plot of AVE_FBL
Dev from Normal
0.5
0.0
-0.5
-1.0
-1.5
-2.0
4
6
8
10
Observed Value

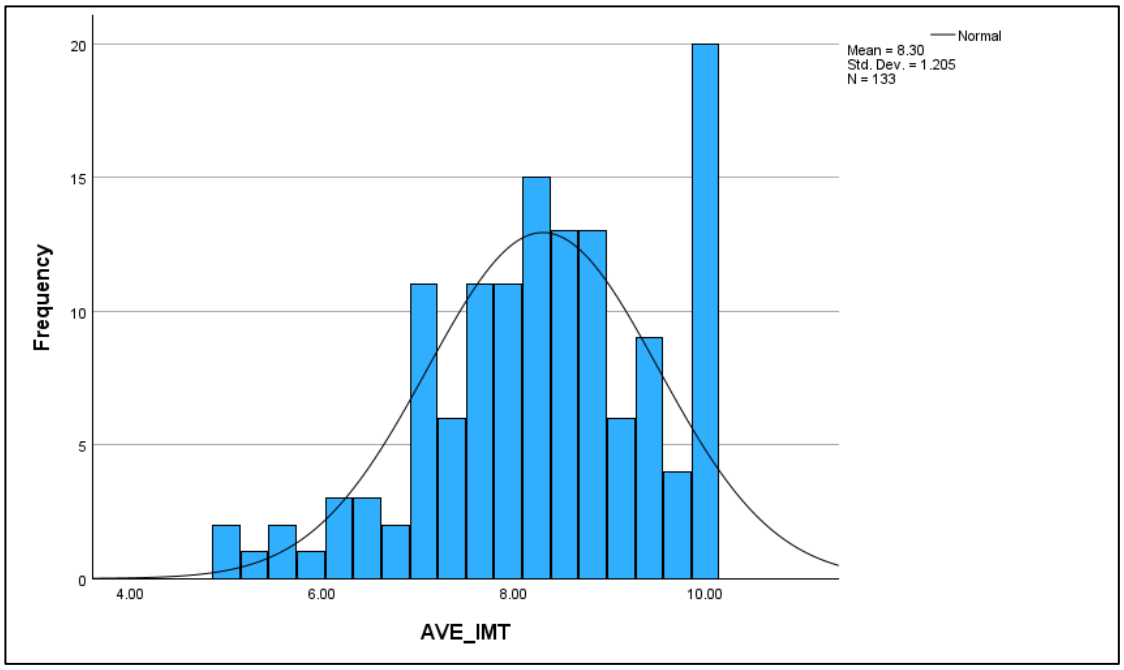
GRIT

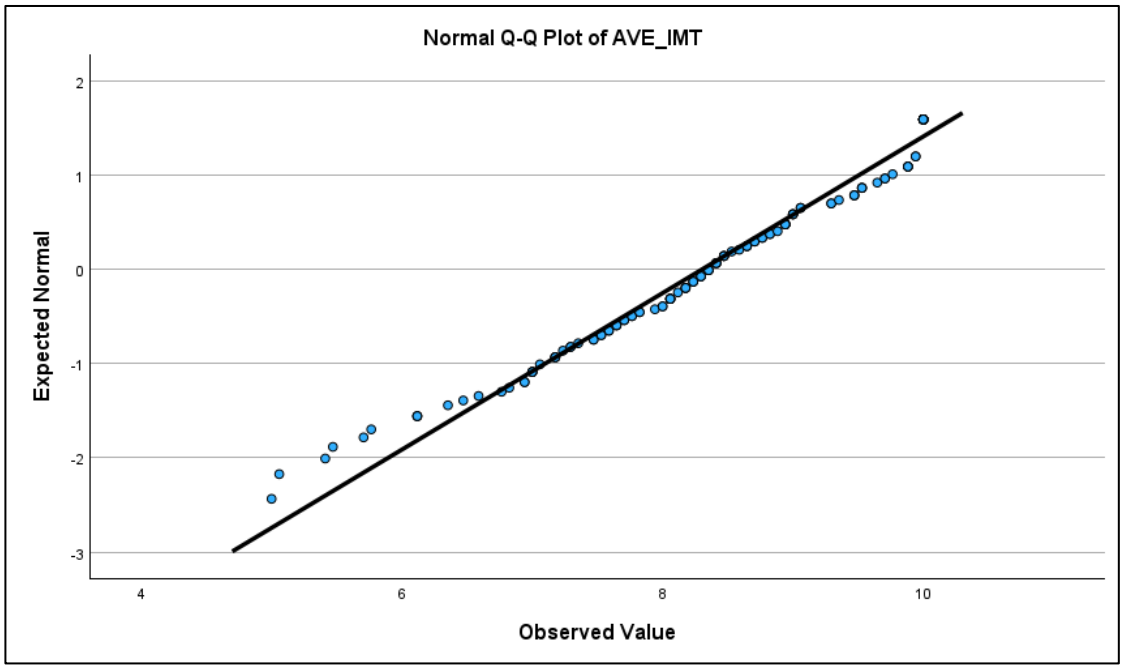

Normal
Mean = 8.69
Std. Dev. = 1.125
N = 133
Frequency
25
20
15
10
5
0
4.00
6.00
8.00
10.00
AVE_GRT

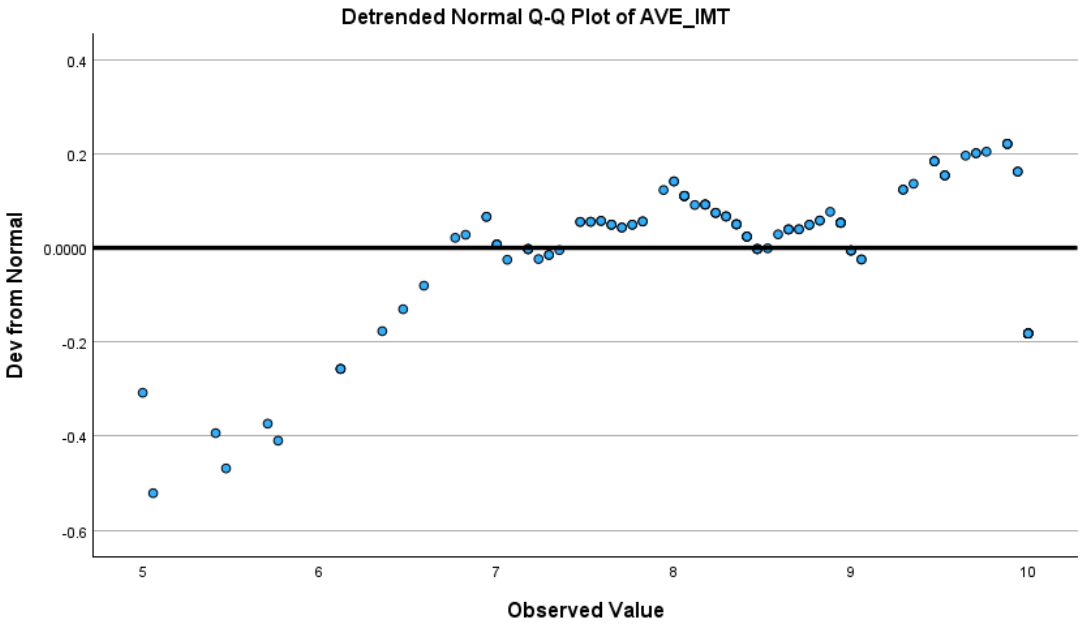

Normal Q-Q Plot of AVE_GRT
Expected Normal
2
1
0
-1
-2
-3
-4
4
6
8
10
Observed Value


Detrended Normal Q-Q Plot of AVE_GRT
Dev from Normal
0.2
0.0000
-0.2
-0.4
-0.6
-0.8
-1.0
-1.2
4
5
6
7
8
9
10
Observed Value

INTRINSIC MOTIVATION






Detrended Normal Q-Q Plot of AVE_IMT
Dev from Normal
0.4
0.2
0.0000
-0.2
-0.4
-0.6
5
6
7
8
9
10
Observed Value

APPENDIX 8

FINALISED RESEARCH INSTRUMENT

Demographic Variable and Response Options in the Final Instrument

No.	Item Label	Item	Response Options
1	DEM1	Gender	Male; Female
2	DEM2	Programme cluster	Business & Management; Social Science and Humanities; Science & Technology
3	DEM3	Semester	Semester 1; Semester 2; Semester 3; Semester 4; Semester 5; Semester 6; Semester 7; Semester 8; Semester 9; Semester 10
4	DEM4	Course	English for Oral Presentation (ELC590); English for Informative Speeches (LCC400); English for Oral Reporting (LCC402); English for Persuasion (LCC600)

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART B: PERCEIVED AUTONOMY SUPPORT **Please tick the extent of your agreement to the item based on the scale below.**											
PAS1	I am provided with different ideas for my oral presentations by my lecturer.										
PAS2	I felt that my lecturer understood my needs while I was preparing for my oral presentations	1	2	3	4	5	6	7	8	9	10
PAS3	I feel confident in my oral presentations due to my lecturer's encouragement.	1	2	3	4	5	6	7	8	9	10
PAS4	I am encouraged by my lecturer to ask questions while preparing for my oral presentations.	1	2	3	4	5	6	7	8	9	10
PAS5	I feel my lecturer values my preferences for conducting my oral presentations.	1	2	3	4	5	6	7	8	9	10
PAS6	I feel my lecturer considers my vision for my oral presentations before giving suggestions.	1	2	3	4	5	6	7	8	9	10
PART C: FEEDBACK LITERACY **Please tick the extent of your agreement to the item based on the scale below.**											
FE1	I reflect on the quality of my oral presentations after receiving feedback.	1	2	3	4	5	6	7	8	9	10
FE2	I use my reflection as a source of information to improve my oral presentations.	1	2	3	4	5	6	7	8	9	10
FE3	I seek out examples of good work to improve my oral presentation.	1	2	3	4	5	6	7	8	9	10
FE4	I listen or read thoughtfully when other people provide me with input about my oral presentations.	1	2	3	4	5	6	7	8	9	10

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART C: FEEDBACK LITERACY (continued) **Please tick the extent of your agreement to the item based on the scale below.**											
FE5	I consider comments I have received on similar tasks when I am working on my oral presentations.	1	2	3	4	5	6	7	8	9	10
FE6	I ask for comments about specific aspects of my oral presentations.	1	2	3	4	5	6	7	8	9	10
FE7	I carefully consider comments about my presentations before deciding if I will use them or not.	1	2	3	4	5	6	7	8	9	10
FE8	I determine which feedback that I will use when receiving conflicting feedback about my oral presentations.	1	2	3	4	5	6	7	8	9	10
FE9	I consider how comments relate to rubrics of the oral presentations.	1	2	3	4	5	6	7	8	9	10
FE10	I use comments on my presentation to refine my understanding of what a good quality presentation looks like.	1	2	3	4	5	6	7	8	9	10
FR1	I check whether my presentation is better after I have acted on the feedback.	1	2	3	4	5	6	7	8	9	10
FR2	I keep comments on previous presentations to use again the in the future.	1	2	3	4	5	6	7	8	9	10
FR3	I am open to reasonable criticism about my oral presentations.	1	2	3	4	5	6	7	8	9	10
FR4	I deal well with any negative emotional responses I have to feedback information.	1	2	3	4	5	6	7	8	9	10
FR5	I find ways to use feedback constructively even if it is negative.	1	2	3	4	5	6	7	8	9	10

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART C: FEEDBACK LITERACY (continued) **Please tick the extent of your agreement to the item based on the scale below.**											
FR5	I find ways to use feedback constructively even if it is negative.	1	2	3	4	5	6	7	8	9	10
FR6	I fully utilise the feedback received even if it is negative.	1	2	3	4	5	6	7	8	9	10
FF1	I offer constructive feedback when commenting on others' oral presentations.	1	2	3	4	5	6	7	8	9	10
FF2	I comment on other people's oral presentations when I am invited to.	1	2	3	4	5	6	7	8	9	10
FF3	I take the initiative to refer to rubrics when commenting on other people's oral presentations.	1	2	3	4	5	6	7	8	9	10
FF4	I offer to provide feedback to my peers.	1	2	3	4	5	6	7	8	9	10
FF5	I try to be very clear when providing feedback to others.	1	2	3	4	5	6	7	8	9	10
FF6	I cross-check my feedback about others' oral presentations.	1	2	3	4	5	6	7	8	9	10
PART D: GRIT **Please tick the extent of your agreement to the item based on the scale below.**											
POE1	I consistently work on my English to improve my oral presentations.	1	2	3	4	5	6	7	8	9	10
POE2	I dedicate time to improving my English for my oral presentations.	1	2	3	4	5	6	7	8	9	10
POE3	I consistently seek to learn more about oral presentations.	1	2	3	4	5	6	7	8	9	10

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART D: GRIT (continued) **Please tick the extent of your agreement to the item based on the scale below.**											
POE4	I consistently stay focused when learning about oral presentations.	1	2	3	4	5	6	7	8	9	10
POE5	I always set goals for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA1	I actively seek new ideas for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA2	I make sure to stay focused for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA3	I proactively develop new ideas for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA4	I am committed to doing my best for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA5	I am dedicated to completing all tasks for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA6	I put in significant effort for my oral presentations.	1	2	3	4	5	6	7	8	9	10
MTA7	I am determined to maintain my learning progress in oral presentations	1	2	3	4	5	6	7	8	9	10
PART E: INTRINSIC MOTIVATION **Please tick the extent of your agreement to the item based on the scale below.**											
SDM1	I find satisfaction in preparing for my oral presentations.	1	2	3	4	5	6	7	8	9	10
SDM2	I feel a sense of enjoyment when I am presenting.	1	2	3	4	5	6	7	8	9	10

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART E: INTRINSIC MOTIVATION (continued) **Please tick the extent of your agreement to the item based on the scale below.**											
SDM3	I find presenting to an audience is a rewarding experience.	1	2	3	4	5	6	7	8	9	10
SDM4	I genuinely enjoy giving oral presentations.	1	2	3	4	5	6	7	8	9	10
SDM5	I find it fulfilling to share my ideas through oral presentations.	1	2	3	4	5	6	7	8	9	10
SDM6	I feel a sense of satisfaction with my performance in oral presentations.	1	2	3	4	5	6	7	8	9	10
SDM7	I feel a sense of calm when delivering my oral presentations.	1	2	3	4	5	6	7	8	9	10
SDM8	I feel excited to share my oral presentation content with the audience.	1	2	3	4	5	6	7	8	9	10
VRM1	I feel increasingly competent in oral presentations with each practice session.	1	2	3	4	5	6	7	8	9	10
VRM2	I am committed to putting in my best effort for my oral presentations.	1	2	3	4	5	6	7	8	9	10
VRM3	I find it important to do well in oral presentations.	1	2	3	4	5	6	7	8	9	10
VRM4	I recognise the value that oral presentations offer me.	1	2	3	4	5	6	7	8	9	10
VRM5	I believe that delivering oral presentations is valuable for my future career.	1	2	3	4	5	6	7	8	9	10
VRM6	I believe delivering oral presentations is crucial for enhancing my communication skills.	1	2	3	4	5	6	7	8	9	10

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART E: INTRINSIC MOTIVATION (continued) **Please tick the extent of your agreement to the item based on the scale below.**											
VRM6	I believe delivering oral presentations is crucial for enhancing my communication skills.	1	2	3	4	5	6	7	8	9	10
VRM7	I believe delivering oral presentations is essential for building my confidence.	1	2	3	4	5	6	7	8	9	10
PART F: ORAL PRESENTATION COMPETENCE **Please tick the extent of your agreement to the item based on the scale below.**											
DEL1	I maintain appropriate eye contact with the audience during my oral presentations.	1	2	3	4	5	6	7	8	9	10
DEL2	I minimise my reliance on slides during my oral presentations.	1	2	3	4	5	6	7	8	9	10
DEL3	I seldom refer to my notes during my oral presentations.	1	2	3	4	5	6	7	8	9	10
DEL4	I demonstrate confidence during my oral presentations.	1	2	3	4	5	6	7	8	9	10
DEL5	I incorporate effective gestures in my oral presentations.	1	2	3	4	5	6	7	8	9	10
DEL6	I actively engage the audience during the Q&A session.	1	2	3	4	5	6	7	8	9	10
CMT1	I always ensure that the content of my presentations matches with the assigned topic.	1	2	3	4	5	6	7	8	9	10
CMT2	I always ensure that the content of my presentations is clear.	1	2	3	4	5	6	7	8	9	10
CMT3	I always ensure that the content of my presentations is well-organised.	1	2	3	4	5	6	7	8	9	10

Label	Construct/Survey Items	Strongly Disagree									Strongly Agree
PART F: ORAL PRESENTATION COMPETENCE **Please tick the extent of your agreement to the item based on the scale below.**											
CMT4	I always ensure that my presentations contain accurate information.	1	2	3	4	5	6	7	8	9	10
CMT5	I always ensure that key points are highlighted in my oral presentations.	1	2	3	4	5	6	7	8	9	10
CM6	I always ensure that my key points are supported by evidence.	1	2	3	4	5	6	7	8	9	10
CMT7	I thoroughly prepare for my oral presentation in advance.	1	2	3	4	5	6	7	8	9	10
AUD1	I project my voice clearly during my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD2	I always speak with enthusiasm during my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD3	I effectively use visual aids, graphics, and slides in my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD4	I maintain good control of my physical movements during my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD5	I maintain good control of my body positioning during my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD6	I effectively use vocal stress to emphasize key points during my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD7	I dress in a manner that is appropriate for my oral presentations.	1	2	3	4	5	6	7	8	9	10
AUD8	I always search for topics that might interest my audience for my oral presentations.	1	2	3	4	5	6	7	8	9	10

AUTHOR'S PROFILE



Nadia Anuar holds a Bachelor's degree in English for Professionals from Universiti Sains Malaysia (2013) and a Master's degree in Applied Language Studies from Universiti Teknologi MARA (2020). Her research interests focus on oral communication competence, student motivation, and feedback practices in higher education.

List of Publications:

Anuar, N., Daud, N. S. M., Ngadiran, N. M., & Zakaria, A. (2026b). A comparative study of hiring managers' expectations and undergraduates' challenges in oral presentation competence. *Higher Education Skills and Work-based Learning*, *16*(3), 663–676. https://doi.org/10.1108/heswbl-09-2025-0395

Anuar, N., Kamil, M. A., Ngadiran, N. M., & Daud, N. S. M. (2023). Development of Speech Assistant Tool for enhancing university students' oral presentation proficiency: A needs analysis. *International Journal of English Language Education*, *11*(1), 53. https://doi.org/10.5296/ijele.v11i1.20651

Anuar, N. ., Muhammad, A. M. ., Daud, N. S. M. ., & Awang, Z. . (2021). Grit as a Moderator Between Students' Intention and Oral Presentation Performance: A Conceptual Study. *International Journal of Asian Social Science*, *11*(6), 270–277. https://doi.org/10.18488/journal.1.2021.116.270.277