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Correlation Between Personality Traits and Goal Orientation Among E-Sport Players at UiTM Seremban 3



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Abstract | E-sports, a rapidly growing industry, requires a deep understanding of players' psychological profiles to enhance their performance and well-being. Competitive e-sport players at Universiti Teknologi MARA (UiTM) Seremban 3 face multifaceted challenges, including performance inconsistency, teamwork issues, stress management, motivation, and burnout. This study addresses these challenges by exploring the interplay between personality traits and goal orientation, aiming to understand how players' psychological profiles influence these problems. Utilizing the Big Five Inventory (BFI) to assess personality traits and the Task and Ego Orientation in Sports Questionnaire (TEOSQ) to evaluate goal orientation, the research involved 136 players and employed Pearson correlation analysis. Significant correlations were found: extraversion was strongly positively correlated with task orientation ($r = 0.655, p < 0.001$) and moderately with ego orientation ($r = 0.393, p < 0.001$); agreeableness showed a moderate positive correlation with task orientation ($r = 0.607, p < 0.001$) and a weaker correlation with ego orientation ($r = 0.404, p < 0.001$); conscientiousness correlated moderately with task orientation ($r = 0.553, p < 0.001$) and weakly with ego orientation ($r = 0.392, p < 0.001$); neuroticism was moderately correlated with task orientation ($r = 0.516, p < 0.001$) but weakly with ego orientation ($r = 0.217, p < 0.001$); and openness had a high correlation with task orientation ($r = 0.610, p < 0.001$) and moderate with ego orientation ($r = 0.445, p < 0.001$). These findings highlight the importance of understanding players' personalities to effectively address performance variability, improve teamwork, manage stress, and prevent burnout, offering insights for targeted interventions to enhance the e-sports experience and foster a resilient, competitive community at UiTM Seremban 3.

Keywords: *Big Five Inventory, Task and Ego Orientation in Sports Questionnaire.*

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I. INTRODUCTION

E-sports, a rapidly evolving and highly competitive industry, has gained immense popularity worldwide. In this dynamic landscape, the performance and behaviour of e-sports players are influenced by various psychological factors, making it crucial to explore the intricate interplay between individual differences and competitive drive [1]. E-sports is a platform for sports activities where participants train and develop their physical or mental skills through the use of information and communication technology [2]. Therefore, this study is centered on identifying the relationships between personality traits and goal-orientedness among players at UiTM Seremban 3 and offering valuable insights into how unique personality characteristics and motivations affect their performance in the world of e-sports.

Players high in openness are likely to embrace task-oriented goals, focusing on personal development, learning, and creative problem-solving within the game [3]. Research indicates that individuals with high openness are more likely to engage in complex tasks and seek out new strategies, enhancing their skill sets and adaptability [4]. In contrast, those lower in openness might prefer more traditional approaches and may exhibit more ego-oriented behaviors, focusing on established methods to achieve recognition [5]. Extraverted players might exhibit both task-oriented and ego-oriented behaviors. They often excel in team-based games due to their strong communication skills and ability to motivate and engage teammates [6]. However, their focus on social recognition and competition can also lead to a higher level of ego orientation, where they are driven by the desire to outperform others and achieve status [7]. The balance between task and ego orientation in extraverts can influence their adaptability and success in various e-sports contexts [8].

II. METHODS

The correlational research design was used to examine the relationship between two or more variables to determine if they are related and to what extent. Data were collected using the Big Five Inventory (BFI) and the Task and Ego Orientation in Sports Questionnaire. The research employs specific methods for data collection, such as surveys and questionnaires, to assess personality traits and goal orientation. The population under investigation comprises approximately 158 active E-sports players at Universiti Teknologi MARA (UiTM) Seremban 3, whose dynamic nature requires careful consideration in sampling. To ensure the findings are representative, the Krejcie and Morgan (1970) sampling table was utilized to determine the appropriate sample size, which was calculated to be 113 participants. This sample size facilitates a statistically significant analysis while accounting for potential dropout rates, ensuring that the results can be generalized to the broader population of e-sports players at UiTM Seremban 3 with a known margin of error and confidence level.

The study utilizes two primary instruments to assess personality traits and goal orientation: the Big Five Inventory (BFI) and the Task and Ego Orientation in Sports Questionnaire (TEOSQ). The BFI evaluates personality traits across five dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness. It comprises a total of 44 items, with a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” This instrument is well-regarded for its robustness and reliability, with Cronbach’s alpha values indicating strong internal consistency for each trait dimension. The TEOSQ measures goal orientation in sports through 13 items, divided into two subscales: task orientation and ego orientation. It employs a similar five-point Likert scale to assess the participants’ focus on personal skill

development versus competitive superiority. The reliability of the TEOSQ has been established through prior research, with translated versions also showing acceptable consistency.

Data collected from the Google Forms questionnaires was analyzed using IBM SPSS software version 28.0. Descriptive statistics were first employed to summarize the basic features of the data and provide a clear overview of the E-sports players' personality traits and goal orientation. A correlation analysis was conducted to explore the relationships between personality traits and goal orientation, providing insights into how these factors interact and influence each other. These statistical methods collectively enable a comprehensive understanding of the psychological profiles of the e-sports players at UiTM Seremban 3.

III. RESULTS AND DISCUSSION

TABLE 1
RELATIONSHIP BETWEEN GOAL ORIENTATION AND PERSONALITY TRAITS

		Task	Ego
Extraversion	Pearson Correlation	0.655**	0.393**
	Significant (2-tailed)	< 0.001	< 0.001
Agreeableness	Pearson Correlation	0.607**	0.404**
	Significant (2-tailed)	< 0.001	< 0.001
Conscientiousness	Pearson Correlation	0.533**	0.392**
	Significant (2-tailed)	< 0.001	< 0.001
Neuroticism	Pearson Correlation	0.516**	0.271**
	Significant (2-tailed)	< 0.001	0.001
Openness	Pearson Correlation	0.610**	0.455**
	Significant (2-tailed)	< 0.001	< 0.001

The data reveals distinct relationships between personality traits and goal orientation. Extraversion is strongly correlated with task orientation ($r = 0.655$, $p < 0.001$), meaning outgoing individuals are highly focused on personal growth and skill development, and moderately correlated with ego orientation ($r = 0.393$, $p < 0.001$), indicating a lesser, but still present, focus on outperforming others. Agreeableness also shows a strong correlation with task orientation ($r = 0.607$, $p < 0.001$), suggesting that cooperative and friendly individuals prioritize their own improvement, and a moderate correlation with ego orientation ($r = 0.404$, $p < 0.001$), implying some competitive tendencies. Conscientiousness is positively correlated with both task orientation ($r = 0.533$, $p < 0.001$) and ego orientation ($r = 0.392$, $p < 0.001$), reflecting a focus on both personal achievement and competition. Neuroticism correlates moderately with task orientation ($r = 0.516$, $p < 0.001$) and weakly with ego orientation ($r = 0.271$, $p = 0.001$), indicating a greater focus on personal growth and a lesser emphasis on competition. Lastly, openness is strongly correlated with task orientation ($r = 0.610$, $p < 0.001$), reflecting a high focus on personal development, and moderately with ego orientation ($r = 0.455$, $p < 0.001$), showing some interest in being better than others.

The study on UiTM Seremban 3 e-sports players reveals that the predominant personality traits are openness and extraversion, with lower levels of neuroticism. Openness and extraversion correlate strongly

with task-oriented goals, reflecting players' focus on personal growth and skill mastery, while conscientiousness and agreeableness also support both task and ego orientations. Gender differences in personality traits were minimal, with both males and females displaying high levels of openness, agreeableness, and conscientiousness, though males showed a slightly higher ego orientation. Male and female players showed high levels of openness, which is crucial for adopting new strategies and enhancing game performance [9]. The study found no significant differences in ego goal orientation between genders, but males were slightly more ego-oriented than females. Personality traits such as extraversion and openness significantly relate to both task and ego orientations, indicating that players with these traits are likely to be both competitive and focused on personal development. These findings highlight the role of personality in shaping e-sports performance and suggest that understanding these traits can aid in designing effective training and team-building strategies. Correlation analysis also shows that there is a low-level relationship between the openness personality trait and a significant ego goal orientation [10].

IV. CONCLUSIONS

E-sports athletes shared many common characteristics, including a strong sense of focus, adaptability, strategic thinking, high levels of competition, and excellent teamwork. Male players frequently demonstrated higher levels of assertiveness and competition, whereas female players tended to combine mastery and performance goals with a stronger emphasis on teamwork. Overall, they displayed a blend of these orientations. The correlation between goal orientation and personality attributes indicated that players who were mastery-oriented prioritized skill development and personal improvement, while performance-oriented players tended to be more assertive and competitive. These results were consistent with the goal of the study, which was to maximize player performance through an understanding of and utilization of the interaction between goal orientation and personality factors.

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