

ORIGINAL ARTICLE

Research Performance, Challenges and Handling Approaches among Academicians in Health-related Disciplines from a Non-Research Public University in Malaysia

Ai-Hong Chen

Centre of Optometry, Faculty of Health Sciences, Universiti Teknologi MARA (UiTM) Cawangan Selangor, Kampus Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor, Malaysia

Abstract:

Introduction: Research in learning institutions is a necessity due to the importance of research in knowledge and intellectual growth. However, research culture in non-research universities is comparatively still at the neophyte stage. This study investigated the research performance, challenges and handling approaches among academicians in health-related disciplines from a non-research public university. **Methodology:** This study was approved by the Institutional Research Ethics Committee (REC/602/19). A survey was conducted among academicians from four different health-related disciplines (medicine, health sciences, dentistry and pharmacy) in one non-research public university in Malaysia between October to December 2019. Five hundred forty-eight academicians were approached to participate in an online self-administered questionnaire. **Results:** The response rate was approximately 37%. On average, academicians in health-related disciplines allocated seven to eight hours per week in research activities and read about one to two journals per week. Research was mainly relied on internal (62%) and national (34%) funding. They published about 1.45 ± 1.56 indexed journal per year. Time constraint, research funding, teaching overload, lack of facility, administrative burden and dealing with difficult people topped the research challenge list. An adaptive coping mechanism was preferred over a maladaptive coping mechanism. **Conclusion:** This study revealed positive research culture and research performance among academicians in health-related disciplines in a non-research public university. Internal driving factors and adaptive coping mechanism prevailed in dealing with research challenges. The information from the survey is useful for other non-research universities to navigate academicians in health-related disciplines amidst multiple responsibilities.

*Corresponding Author

Ai-Hong Chen, PhD
Email: chenaihong@uitm.edu.my

Keywords: Challenges, coping mechanism, health, performance, research

1. INTRODUCTION

Higher education institutions play a vital role in the discovery, dissemination and application of knowledge [1–3]. They directly create knowledge via research, disseminate knowledge via publication, transfer knowledge via teaching; as well as indirectly put knowledge into application and utilization through learners. Research enculturates research thinking which is essential for intellectual growth. Research thinking allows an in-depth understanding of why things happen as they do. Unfortunately, the competency and productivity of academicians were reported to cripple by stress; not only upsetting administrative, teaching, research quality but also impairing communication and work relationships [4–16]. Local public universities were originally built with a focus on teaching and learning to produce skilled manpower for the country's early development. The role expanded and evolved over the years with the social and economic transformation in Malaysia. The job scope of an academician nowadays is not only pertaining to teaching but also partakes in research, publication, consultation, income

generation and administrative work. Regardless of what types of public universities (research or non-research), the promotion yardsticks for academicians are generally based on the outcome of research [13, 14, 16]. With the current trend of local universities competing with one another for world ranking, academicians encounter unprecedented challenges that call for more scrutiny [4–16]. Information on research culture at non-research university in Malaysia is still lacking especially among academicians in health-related disciplines with additional responsibility in clinical engagement. This study focused on examining the performance, challenges and handling approaches among academicians in health-related disciplines from a non-research public university. It is important to assess those elements for strategic planning to support them navigating amidst multiple responsibilities.

2. METHODOLOGY

A survey was conducted in one non-research public university. This study was approved by the Institutional

Research Ethics Committee (REC/602/19). Informed consent was obtained prior to participation. All academicians (five hundred forty-eight) from four different health-related disciplines (medicine, dentistry, pharmacy, health sciences) in the same non-research public university were invited to participate in an online self-administered questionnaire. The survey was conducted between October and December 2019. English is a widely spoken language and the academicians in Malaysia have good English proficiency. The questionnaires were constructed in the English language using both open-ended and closed-ended questioning structures. Fill in the blank was used in open-ended question approach. Likert scale of 10, dichotomous scale (yes-no) and pre-determined multiple choices were applied in closed-ended question approach. The items in the questionnaire were first face validated and then a pre-test was carried out to minimize ambiguity of wordings and understanding the meaning of items and the respective scales. Four types of item constructs were used in this health research questionnaire (Table 1).

Table 1: Four types of item construct used in Health Research Questionnaire.

Four types of item construct	Items from Health Research Questionnaire
Closed-ended question with dichotomous scale (yes-no)	<ul style="list-style-type: none"> Professional body involvement? Research collaborations? Are you willing to help in the following role as volunteers? Do you have the following grant as principal investigator?
Closed-ended question with Likert scale	<ul style="list-style-type: none"> How does the following contribute to the motivation behind your research? How do you rate the following challenges in causing problems in your research? How frequent do you use the following coping mechanism to handle your research challenges? How frequent do you manage your disagreement with others using the following options? Which of the following motivates you the most to volunteer?
Closed-ended question with multiple choices	<ul style="list-style-type: none"> How many journal articles your read in a week? How many hours per week are you willing to volunteer?
Open-ended question (fill in the blank)	<ul style="list-style-type: none"> How many hours do you spend on research per week? Past performance on average publication trend per year.

3. RESULTS AND DISCUSSION

The response rate of this study was 37%. Out of 548 academicians, only 205 accepted the invitation to participate. The highest response rate was from dentistry (75%), followed by health sciences (55%), pharmacy (35%) and medicine (21%). The respondents were mainly females (68%) and clinicians (64%). The data were further filtered for accuracy and completeness. The final analysis and descriptive presentation were based on 187 responses. The data were analyzed according to research performance, challenges, coping mechanism and ecosystem. The response rate of this study was within the range of good survey response rate reported in previous studies on internal surveys that generally

received a 30-40% response rate on average, compared to an average 10-15% response rate for external surveys [17–29].

3.1 Research Performance

Research performance was examined in terms of reading habits, time allocation for research, driving factors to do research, grant acquisition as principal investigator and publication inclination. Total journal articles read in a week was used to study the pattern of continuous engagement in reading for knowledge (Figure 1). Approximately 42% read one to two journal articles per week. Three quarters read one to five articles per week. The total time allocated for research activities was 7.71±7.50 hours per week (Figure 2). Internal factors [knowledge (8.56±1.55) and self-satisfaction (8.34±1.63)] was leading by one scale interval higher on average than external factors [job requirement (7.5±2.03) and promotion (7.28±2.07)] as the driving factors to do research. The majority embarked on research relying on internal (62%) and national (34%) grants as a source of funding. Only 13% and 6% engaged in industry and international grants, respectively. On average, academicians in health-related disciplines published 1.67±1.26 proceedings, 1.45±1.56 indexed journals and 1.20±1.90 non-indexed journals publication per year. Book and book chapter publications were 0.32±0.86 and 8.87±1.60 per year, respectively.

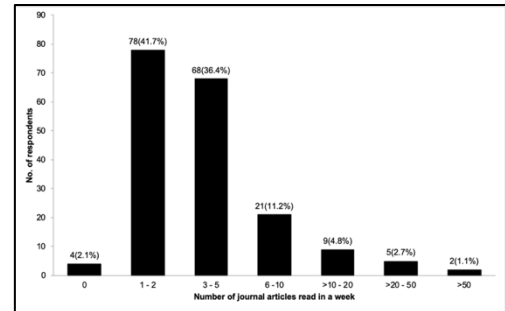


Figure 1: Distribution of the total number of journal articles read per week. There are seven categories in the horizontal axis. The number indicates the total respondents with the respective percentage in brackets.

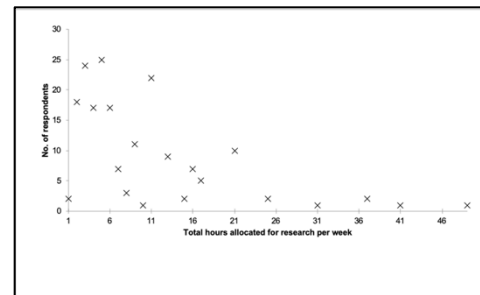


Figure 2: Distribution of the total hours allocated for research activities per week.

3.2 Health Research Challenges

Eighteen research challenges were surveyed (Figure 3). Time constraint, lack of research funding, teaching overload, lack of facility, administrative burden and dealing with difficult people topped the research challenges list. Poor health problems, lack of family support and the negative impact from defamation gossiping were at the bottom of the research challenges list. Poor literature access, stress, poor quality of postgraduates, clinical commitment, poor self-discipline, unsupportive superior, emotional turmoil, ethical problem, peer rivalry and personal health problem were within the middle range of the Likert scale.

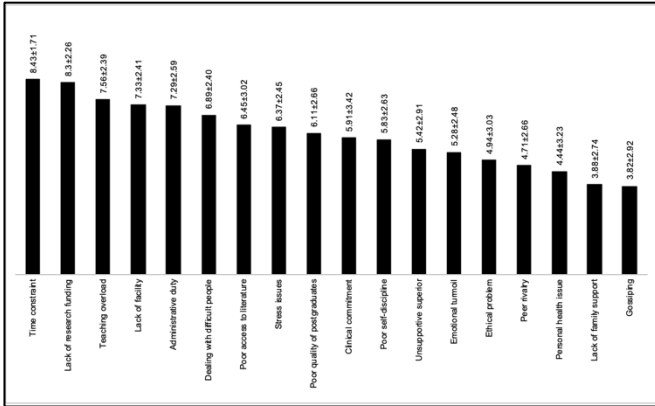


Figure 3: Comparison of the 18 pre-determined research challenges. The number at the bar indicates the mean and standard deviation of Likert scales (1 is ‘no effect’ and 10 is ‘the highest effect’).

3.3 Adaptive and Disruptive Coping mechanism

This investigation compared the preference between adaptive and maladaptive coping mechanisms (Figure 4). In the inquiry on the coping mechanism to handle research challenges, adaptive coping mechanisms under investigation consisted of four problem-solving approaches (‘read to find solution’, ‘try again’, ‘talk to others’, ‘consult senior’) and one relaxation approach (‘spa’). The maladaptive coping mechanism under investigation comprised of three unhealthy self-soothing reaction (‘complaining’, ‘gossiping’, ‘excessive sleeping’), one numbing behaviour (‘binge eating’) and four escape reaction (‘avoid meeting people’, ‘hide at home’, ‘absent from work’, ‘give up’). Out of thirteen coping mechanisms in handling research challenges, adaptive coping mechanism like ‘finding solution’, ‘try again’, ‘talk to others’ and ‘consult seniors’ were the four leading choices at least one to two scales higher than the other factors. In probing the coping mechanisms particularly used in managing disagreement with others, two adaptive (‘logical reasoning’, ‘negotiation’) coping mechanisms and four maladaptive coping mechanisms (‘avoidance’, ‘confrontation’, ‘termination of relationship’, ‘engage in defamation gossiping’) were listed. The most preferred coping mechanism to manage disagreement with others was ‘logical reasoning’, followed by ‘negotiation’ (Figure 5). Maladaptive coping mechanisms like ‘avoidance’, ‘confrontation’, ‘terminate relationship’ and ‘engage in negative gossiping’ to handle disagreement were less favourite.

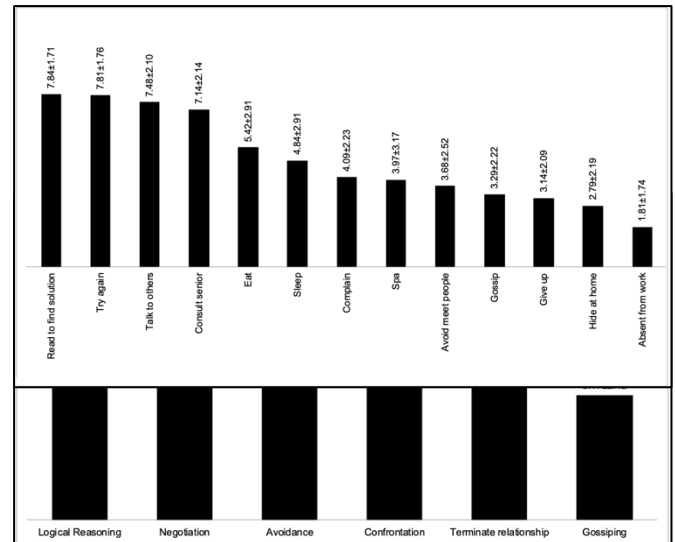


Figure 5: Comparison of the 6 pre-determined coping mechanisms to manage disagreement with others. The number at the bar indicates the mean and standard deviation of Likert scales (1 is ‘never’ and 10 is ‘always’).

3.4 Research Ecosystem

Connectivity was assessed in terms of professional body involvements and research collaborations. Approximately 92% involved in professional body memberships. Three quarter of them collaborated with other local universities (75%) and within university (73%). Research collaboration with government (44%), industry (40%) and international (40%) bodies was much less. The proactive volunteering role in enhancing research ecosystem was studied in term of the total hours per week of volunteering work engagement and the type of volunteering scopes engagement. Most indicated a willingness to spend one to two hours per week for volunteering work (Figure 6). Majority expressed willingness to volunteer in assessor role [article reviewer (85%) & research proposal evaluator (78%)]. The role of proof-reader either content (61%) or language (39%) were less desired. Research proposal facilitator (38%) and statistical analysis coach (25%) were the least preferred. About 49% inclined to volunteer as a publication coach. In the comparison of the 5 pre-determined driving factors in volunteering to support the research ecosystem, personal reasons such as the sense of responsibility (8.16±1.67), self-satisfaction (7.83±1.84), self-actualization (6.3±2.53) seemed to prevail compared to the external factors like a monetary reward (6.18±2.56) and peer recognition (5.99±3.66); where Likert scales of 1 and 10 indicated ‘the least priority’ and ‘the main priority’ respectively.

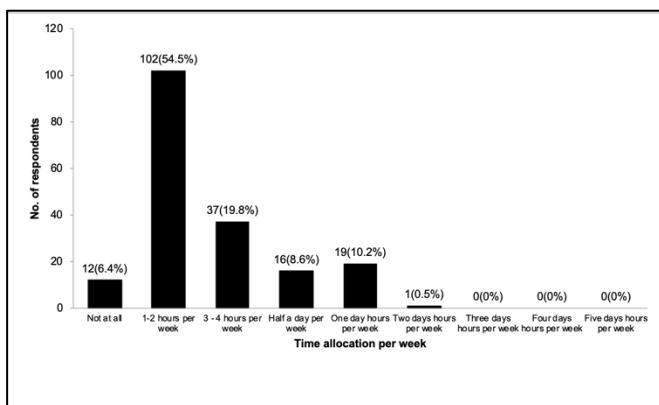


Figure 6: Distribution of the time allocation as a volunteer per week to support the research ecosystem. The number indicates the total respondents with the respective percentage in brackets.

3.5 Impact on Academic Career in Health Related Disciplines

Academicians in health-related disciplines in non-research university allocated about seven to eight hours per week for research activities. Spending seven to eight hours per week was approximately 18.75% of the total forty official working hours per week. If the job scopes of the academicians in health-related disciplines consisted of six components (teaching, supervision, research, publication, community service, administration duty), the workable percentages should be about 50%, stipulating that publication and supervision were interrelated with research. Both internal factors (knowledge and self-satisfaction) and external factors (promotion and job requirement) were driving factors to do research. The basic value in pursuing intellectual growth seemed to remain intact among academicians in health-related disciplines.

Reading habit was chosen as a part of research performance investigation because reading is an essential tool for lifelong learning and contributes to intellectual growth [30]. Reading transfers experiences to the academicians to expand, identify, extend and intensify research interest and gain deeper understanding of the relevant fields [31–34]. This study presumed that the interest to read could be linked to and determined by the amount of time committed to reading activity [35–37]. Total journal articles read in a week denoted the continuous engagement in reading for knowledge. If the total journals read within three years of postgraduate study are estimated at about 200 journals, reading habit is about one journal per week on average [200 journals / (3 years x 52 weeks)]. Therefore, academicians in health-related disciplines in a non-research university read one to two journals per week could be considered as a sensible practice of academic reading habit. Nevertheless, the more the academicians read, the more they can brush up on scientific concepts and update on new research. More reading also helps to develop critical thinking skills and strengthen scientific writing skills.

Although it might be demoralizing for academicians to be judged based on the quantity rather than the quality of publication and grants acquisition, the research component was unavoidable criteria for promotion where the number is used as part of the performance measures or key performance

index. More grants and more publications in high impact journals increase competitiveness in promotion. Majority academicians in health-related disciplines embarked on research as principal investigators but relying predominantly on internal and national grants. The research engagement seems promising but there is still room for improvement to explore other sources of funding. Although active participation in the publication is crucial to stimulate research thinking to enhance teaching quality [1–3], the debate about how many publications per year is sufficient remains inconclusive. Based on the guideline of the Fundamental Research Grant Scheme (FRGS) amendment 2020, the expected output is two indexed publications for a research project duration of two to three years [38]. No specific number of publications is imposed in Transdisciplinary Research Grant Scheme (TRGS) amendment 2020 and Longitudinal Research Grant Scheme (LRGS) amendment 2020 but publication in Q1 journal is highly recommended [39–40]. High impact factor journals encourage academicians to do quality research. Therefore, academicians in health-related disciplines published on average of one indexed journal article publication per person per year is within the norm from the expected performance of an average grant holder. Publication requirements for academicians should be measured as an average over two to three years period to avoid undue pressure in yearly performance amidst demands and variations due to unforeseen circumstances. Publication in better and higher impact journals within the respective fields should be encouraged while moving up the academic career ladder. The quality of contributions should be emphasized. Publishing low quality papers with high redundancy in its content should be discouraged. Quantity of publication should be deliberated synchronously with qualitative judgement. It should not be restricted to impact factor or citation alone but should integrate the relevance of publication with the respective scientific community and the betterment of humanity.

Upon securing research grants, academicians sometimes need to work past their office hours and sacrifice their family time to conduct research due to relatively higher teaching load in non-research universities. The extra and long working hours could be a stress factor that might jeopardise a healthy working relationship [41–44]. The working relationship had been linked to productivity and competency [45–47]. Communication breakdown can stir up trivial matters to blow out of proportion and become complicated. Coping mechanisms are strategies that can be employed in dealing with stress and managing emotions [48, 49]. There are two types of coping mechanisms: adaptive coping mechanisms and maladaptive coping mechanisms [48, 49]. Adaptive coping mechanisms encompass seeking external support; relaxation activities; problem-solving; mental re-alignment and physical activity. Adaptive coping mechanisms lead to positive and healthy outcomes in the long-term. Maladaptive coping mechanisms include escape; unhealthy self-soothing or numbing behaviours; risk-taking; and self-harm. Maladaptive coping mechanisms tend to breed displeasing consequences. Those who can adjust to stressful situations through adaptive coping mechanisms are less likely to experience stress. Those who find themselves defaulting to maladaptive coping mechanisms tend to experience difficulty and eventually see a negative impact. In the inquiry on coping mechanisms to handle research challenges, adaptive coping mechanisms like finding a solution, try again, talk to others

and consult seniors were the four leading preferences among academicians in health-related disciplines. Problem-solving approach and external support seemed to dominate. Relaxing, escape, unhealthy self-soothing or numbing behaviours types of coping mechanisms were less favourite. In probing the coping mechanisms used in managing disagreement with others, the preferred coping mechanism to manage disagreement with others included problem solving approach like logical reasoning and negotiation. Maladaptive coping mechanisms like avoidance, confrontation, terminate relationship and engage in negative gossiping to handle disagreement were less favourite.

Teamwork is essential to have a sustainable research ecosystem. The connectivity of academicians in health-related disciplines with other local higher institutions was most common. However, more effort seemed to be needed in establishing collaboration with the government, industry and international bodies. The proactive volunteering role in enhancing research ecosystem was studied in terms of the total hours per week of volunteering work and the type of volunteering scopes engagement. Most were willing to spend one to two hours per week for research related volunteering work. Assessor roles like the manuscript reviewer and research proposal evaluator were the popular choices. The role as a proof-reader either content or language was less favourite. Statistical analysis coaching was the least well-liked. Possible explanations might be the familiarity, complexity and competency associated with respective tasks. Internal factors seemed to prevail compared to external factors as the motivational force behind the volunteering initiatives.

4. CONCLUSION

Positive research culture and performance are evident among academicians in health-related disciplines in a non-research public university. Internal driving factors and adaptive coping mechanisms prevailed in dealing with research challenges. The information from the present study can be adopted or adapted by other non-research universities in navigating academicians in health-related disciplines amidst multiple responsibilities. The limitation of this study is restricted generalizability due to involvement of only one non-research university. Future studies with a wider array of settings will be beneficial.

ACKNOWLEDGEMENTS

Special thanks to Dr. Mohammad Johari Ibrahim, Dr. Eddy Hasrul Hassan, Assoc. Prof. Dr. Norazmir Md Nor, Assoc. Prof. Dr. Fazah Akhtar Hanapiah, Assoc. Prof. Dr. Mizaton Hazizul Hasan and Dr. Thuhairah Hasrah Abdul Rahman for technical supports in facilitating the validation, pre-test and subject recruitment. Thanks to Mr. Muhamad Wafi Mohd Faudzan in helping to convert the questionnaire into an online version. Financial support: 600-IRMI 5/3/LESTARI (065/2019).

REFERENCES

- [1] McIntyre D.I., "The Contribution of Research to Quality in Teacher Education.," *South Pacific Journal of Teacher Education*. 8(1-2): 4-19, 1980.
- [2] Czeglédi C., and Juhász T., "The role of tertiary education in career and life-long learning among day-time students (based on empirical findings).," *Journal of Education Culture and Society*. 4(1): 190-198, 2020.
- [3] Burn K., and Mutton T., "A review of 'research-informed clinical practice' in Initial Teacher Education.," *Oxford Review of Education*. 41(2): 217-233, 2015.
- [4] Blix A.G., et al., "Occupational stress among university teachers.," *Educational Research*. 36(2): 157-169, 1994.
- [5] Winefield A.H., and Jarrett R., "Occupational Stress in University Staff.," *International Journal of Stress Management*. 8(4): 285-298, 2001.
- [6] Tytherleigh M.Y., et al., "Occupational stress in UK higher education institutions: a comparative study of all staff categories.," *Higher Education Research & Development*. 24(1): 41-61, 2005.
- [7] Ofoegbu F., and Nwadiani M., "Level of perceived stress among lecturers in Nigerian Universities.," *Journal of Industrial Psychology*. 33: 66-74, 2006.
- [8] Hendel D.D., and Horn A.S., "The Relationship Between Academic Life Conditions and Perceived Sources of Faculty Stress Over Time.," *Journal of Human Behavior in the Social Environment*. 17(1-2):61-88, 2008.
- [9] Ahsan N., et al., "A Study of Job Stress on Job Satisfaction among University Staff in Malaysia: Empirical Study.," *Eur J Soc Sci*. 8(1): 121-131, 2008.
- [10] Fako T.T., "Occupational stress among university employees in Botswana.," *European Journal of Social Sciences*. 15:313-326, 2010.
- [11] Archibong I., et al., "Occupational stress sources among university academic staff.," *European Journal of Educational Studies*. 2: 217-225, 2010.
- [12] Fauzia K., et al., "Occupational role stress of the public and private sector universities teachers.," *Journal of Language in India*. 3: 3-22, 2011.
- [13] Nordin R., et al., "Prevalence and associated factors of stress in dental healthcare workers of a higher institution of learning in Kelantan.," *Archives of Orofacial Sciences*. 1: 51-56, 2006.
- [14] Huda B.Z., et al., "A study of job strain and dissatisfaction among lecturers in the School of Medical Sciences Universiti Sains Malaysia.," *The Southeast Asian journal of tropical medicine and public health*. 35(1): 210-218, 2004.
- [15] Sun W., et al., "Occupational Stress and Its Related Factors among University Teachers in China.," *Journal of Occupational Health*. 53(4): 280-286, 2011.
- [16] Noor A., and Noor Hassim I., "Occupational stress and its associated factors among academicians in a research university, Malaysia.," 16: 81-91, 2016.
- [17] Yu J., and Cooper H., "A Quantitative Review of Research Design Effects on Response Rates to Questionnaires.," *Journal of Marketing Research*. 20(1): 36-44, 1983.
- [18] Viswesvaran C., et al., "How definitive are conclusions based on survey data: Estimating robustness to nonresponse.," *Personnel Psychology*. 46(3): 551-567, 1993.
- [19] Mavis B.E., and Brocato J.J., "Postal Surveys versus Electronic Mail Surveys.," *Evaluation & the Health Professions*. 21(3): 395-408, 1998.
- [20] Roth P.L., and BeVier C.A., "Response Rates in {HRM}/{OB} Survey Research: Norms and Correlates, 1990-1994.," *Journal of Management*. 24(1): 97-117, 1998.

- [21] Baruch Y., "Response Rate in Academic Studies-A Comparative Analysis.," *Human Relations*. 52(4): 421–438, 1999.
- [22] Greer T., *et al.*, "Likelihood of Participating in Mail Survey Research.," *Industrial Marketing Management*. 29(2): 97–109, 2000.
- [23] Schalm R.L., and Kelloway E.K., "The relationship between response rate and effect size in occupational health psychology research.," *Journal of Occupational Health Psychology*. 6(2): 160–163, 2001.
- [24] Cycyota C.S., and Harrison D.A., "Enhancing Survey Response Rates at the Executive Level: Are Employee- or Consumer-Level Techniques Effective?," *Journal of Management*. 28(2): 151–176, 2002.
- [25] Groves R.M., "Nonresponse Rates and Nonresponse Bias in Household Surveys.," *Public Opinion Quarterly*. 70(5): 646–675, 2006.
- [26] Porter S.R., and Whitcomb M.E., "The Impact of Contact Type on Web Survey Response Rates.," *Public Opinion Quarterly*. 67(4): 579–588, 2003.
- [27] Bonometti R.J., and Tang J., "A dynamic technique for conducting online survey-based research.," *Competitiveness Review*. 16(2): 97–105, 2006.
- [28] Werner S., *et al.*, "The Reporting of Nonresponse Analyses in Survey Research.," *Organizational Research Methods*. 10(2): 287–295, 2007.
- [29] Cook C., *et al.*, "A Meta-Analysis of Response Rates in Web- or Internet-Based Surveys.," *Educational and Psychological Measurement*. 60(6): 821–836, 2000.
- [30] Kirsch I.S., and Guthrie J.T., "Adult Reading Practices for Work and Leisure.," *Adult Education Quarterly*. 34(4): 213–232, 1984.
- [31] Mokhtari K., and Sheorey R., "Reading habits of university ESL students at different levels of English proficiency and education.," *Journal of Research in Reading*. 17(1): 46–61, 1994.
- [32] Cook A.E., *et al.*, "What is readily available during reading? A memory-based view of text processing.," *Discourse Processes*. 26(2–3): 109–129, 1998.
- [33] Green P., "Teachers intervention in children's reading.," *Journal of Child Hood Education*. 46(3): 147–149, 2002.
- [34] Shen L., "Computer technology and college students' reading habits.," *Chia-Nan Annual Bulletin*. 32: 559–572, 2006.
- [35] Liu Z., "Reading behavior in the digital environment.," *Journal of Documentation*. 61(6): 700–712, 2005.
- [36] Nor Shahriza A., "Reading habits and attitude in Malaysia: analysis of gender and academic programme differences.," *Kekal Abadi*. 25: 16–24, 2006.
- [37] Karim N.S.A., and Hasan A., "Reading habits and attitude in the digital age.," *The Electronic Library*. 25(3): 285–298, 2007.
- [38] FRGS BKPI JPT KPM, "Garis Panduan Skim Geran Penyelidikan Fundamental (Pindaan Tahun 2020)", *Kementerian Pendidikan Malaysia*. 2020.
- [39] TRGS BKPI JPT KPM, "Garis Panduan Skim Geran Penyelidikan Transdisiplinari (Pindaan Tahun 2020)", *Kementerian Pendidikan Malaysia*. 2020.
- [40] LRGS BKPI JPT KPM, "Garis Panduan Skim Geran Penyelidikan Jangka Panjang (Pindaan Tahun 2020)", *Kementerian Pendidikan Malaysia*. 2020.
- [41] Mark G., and Smith A., "A Qualitative Study of Stress in University Staff.," *Advances in Social Sciences Research Journal*. 5(2):238-247, 2018.
- [42] Oswald A.J., *et al.*, "Happiness and Productivity.," *Journal of Labor Economics*. 33(4): 789–822, 2015.
- [43] Buss D.M., "The evolution of happiness.," *American Psychologist*. 55(1):15–23, 2000.
- [44] Hughes J., and Bozionelos N., "Work-life balance as source of job dissatisfaction and withdrawal attitudes.," *Personnel Review*. 36(1): 145–154, 2007.
- [45] Lyubomirsky S., *et al.*, "The Benefits of Frequent Positive Affect: Does Happiness Lead to Success?," *Psychological Bulletin*. 131(6): 803–855, 2005.
- [46] Boehm J.K., and Lyubomirsky S., "Does Happiness Promote Career Success?," *Journal of Career Assessment*. 16(1): 101–116, 2008.
- [47] Gavin J.H., and Mason R.O., "The Virtuous Organization: The Value of Happiness in the Workplace.," *Organizational Dynamics*. 33(4): 379–392, 2004.
- [48] Thompson R.J., *et al.*, "Maladaptive coping, adaptive coping, and depressive symptoms: Variations across age and depressive state.," *Behaviour Research and Therapy*. 48(6): 459–466, 2010.
- [49] Cramer P., "Understanding Defense Mechanisms.," *Psychodynamic Psychiatry*. 43(4): 523–552, 2015.