

## **Mental well-being and its association with academic performance among final-year students of the Faculty of Sports Science & Recreation, Universiti Teknologi MARA: A case study**

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### **Abstract:**

Mental health problems are prevalent and severe among university students, which is a serious concern for all campuses. Due to academic pressures associated with coursework, being away from home, and some financial strain, students are believed to eventually develop mental health concerns. Although mental health does not show the features of mental illnesses and negative symptoms, it affects a person's subjective well-being and psychological functioning. Positive mental health is the bedrock of mental well-being and a critical aspect of the life of university students with respect to their learning process. Mental health difficulties obstruct not only their daily activities but also their academic success. Thus, it is timely to research the potential relationship between mental well-being and academic success in relation to university students' ability to live a balanced existence. This study adopted a survey design based on a questionnaire method. The Warwick–Edinburgh Mental Well-Being Scale was employed to obtain the data of 226 final-year students from the Faculty of Sports Science & Recreation at the five campuses of the Universiti Teknologi Mara (UiTM). In relation to the status of mental well-being, the respondents revealed that they are enjoying a high degree of mental well-being (96%), whereas only 0.4% are suffering from depression. Meanwhile, moderate positive significant relationship was observed between the mental well-being and academic performance of final-year students of the Faculty of Sports Science & Recreation, UiTM. This indicated that mental well-being sets the groundwork for an individual's optimal psychological development, including the development of efficient learning. Mental health has a favorable and significant effect on students' academic achievement. However, there are a few minor gray areas that the institution should address to help students overcome this problem. Additional research is required to understand the ways to improve students' mental well-being and the elements that contribute to this population's positive mental well-being.

**Key Words: Mental well-being, Academic performance, Eudaimonic, Hedonic, Spiritual well-being**

### **Introduction**

University students develop their viewpoints on their daily lives as they adjust to the pressures of their academic demands year after year. Certain students may acquire poor eating habits and disorganized study hours, and those from low-income backgrounds may even work part-time jobs to meet their daily expenditures. All these behaviors may affect their mental well-being, either directly or indirectly. According to Cilar, Barr, Štiglic, and Pajnkihar (2019), when students transfer from high school to university, they face a variety of stressors that may increase their sensitivity to poor mental health.

Fang et al. (2020) stated that parental wishes are seen as an early predictor of social adaptability and have a strong correlation with actual instructional and scholarly achievement. For college students, their parents want to see them earn passing grades and work hard during their studies. Without a question, this places a mental pressure on the youngsters as they attempt to do what their parents want of them. Though their parents do not compel them to earn passing grades, the unavoidable fear that they will fall short of their parent's expectations contributes to their mental strain.

Joblessness has increased throughout this pandemic era, as Saraya (2020) revealed that Malaysia's unemployment rate increased by 17.1%, from 521,300 individuals in March 2020 to 610,500 in March 2021. As unemployment grows, final-year students may suffer mental health difficulties, as they believe that everything they have accomplished during their university years would be in vain if they do not obtain employment upon graduation.

According to Meagan (2020), increased levels of mental health are associated with increased learning, innovativeness, and profitability, more masterful social behavior and positive social connections, as well as improved physical well-being and future. According to the Nursing Midwifery and Allied Health Professions Policy Unit (2016), mental health challenge is a term that is frequently used to characterize mental health concerns ranging from low rates of mental illness to severe and persistent mental illnesses. This affects not just one but all layers of society and can alter how a person thinks. The National Association for Mental Health (2018), as cited by Cilar et al. (2019), corroborates this. Mental health problems can impair a person's learning, including the ability to think, feel, and perform. Anxiety and depression are the most prevalent mental health illnesses, whereas schizophrenia and bipolar disorder are less prevalent.

The World Health Organization and Calouste Gulbenkian Foundation (2014), which was cited by Cilar et al. (2019), stated that good mental health is the bedrock of a person's health and well-being and that poor mental health is associated with rapid social change, occupational pressure, isolation, unhealthy behaviors, the threat of violence, and physical disease. The findings of the WHO World Mental Health International College student project indicated that mental health disorders were associated with age, sex, marital status, ethnic origin, parents, school ranking, sexual orientation, and college motivation in eight countries (Auerbach et al., 2018).

Therefore, in this paper, we assessed the mental well-being and its association with academic performance in a sample of Sports Science & Recreation final-year students enrolled at the five campuses of the Universiti Teknologi MARA (UiTM), Malaysia.

### **Materials and methods**

This was a cross-sectional online survey of students enrolled in Sports Science & Recreation programs at the five campuses of the UiTM, Malaysia. This study was approved by the University Research Committees.

#### *Participants*

This study was conducted on final-year students enrolled in a program offered by the Faculty of Sports Science & Recreation in Malaysia. Only final-year students were eligible to participate. A total of 226 students answered the survey out of 271 who were selected to access the Google form.

#### *Procedure*

This study employed a multistage sampling technique. The first was stratified sampling, in which the respondents were selected from five campuses: Arau, Seremban, Shah Alam, Jengka, and Samarahan. The second was convenience sampling, in which the researchers randomly distributed the questionnaire to students from all the five campuses *via* the Student Representative Council. Traditionally, most research involved direct contact with respondents. However, in the age of social distancing, collecting data using "conventional ways" is difficult. Given the risk of COVID-19 infection and the situations in which data collection activities take place, the researchers adjusted their data collection procedures.

Alternative and innovative ways of performing fieldwork are required to supplement standard methods of survey data collection. Thus, this study was conducted under the COVID-19 condition using an online platform. The survey was accessible to students *via* any electronic device capable of accessing a Google form. The survey began with a summary of the study, followed by a lengthy informed consent form that outlined the participants' rights, the anticipated risks and advantages of participating, and the precautions taken by the researchers to maintain confidentiality of their personal information. The survey was made accessible to students once they have consented to this informed consent. It took an average of 15 min to complete the online questionnaire.

#### *Instruments*

The mental well-being of the final-year students and their academic performance were assessed using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) and the Academic Success Inventory for College Students (ASICS), respectively. This research exclusively focuses on the association between students' mental health and academic success in their final-year. The instrumentation used to collect data was divided into three sections, with each section measuring distinct variables according to the objectives of the study. The demographic items in Section A ascertain the final-year students' demographic profile.

The items in Section B were adopted from the WEMWBS. With the Cronbach's alpha value of 0.9, this section assessed the respondents' mental well-being. It also contains 20 items that were categorized into three components. Each component assessed the distinct dimensions of mental well-being, such as eudaimonic, hedonic, and spiritual well-being. The WEMWBS had a strong correlation with other measures of mental state and well-being but a weak correlation with the measures of general health. The WEMWBS has a minimum score of 20 and a maximum score of 100. A higher score indicates better mental health well-being. Another approach is a WEMWBS cut point of 40 or less for probable depression and 41–44 for possible depression. In this classification, scores of 45–59 and 60 or above indicate average and high mental well-being, respectively. Some investigators prefer to analyze their data using categorical approaches. Scores can be categorized as high, average, and low mental well-being using cut-points. Several different cut-points have been used. However, in this study, the researcher used the cut point of 40 or below for probable depression, as aforementioned. The items included positive affect (feelings of optimism, cheerfulness, and relaxation), satisfying interpersonal relationships

and positive functioning (energy, clear thinking, self-acceptance, personal development, competence, and autonomy). It uses a five-point Likert scale ranging from “none of the time” to “all of the time.”

The items in Section C was taken from the ASICS adopted from Welles (2010). This 48-item questionnaire assessed the respondents’ academic performance. For this instrument, Cronbach’s alpha value was 0.91. Originally, this section has 50 items. However, two items were deleted due to inconsistency with the responses of the research participants. A seven-point Likert scale was used with the items graded from 1 (strongly disagree) to 7 (strongly agree). In addition, the reliability and validity of the 48-item measure were examined. Cronbach’s alpha value for the entire ASICS was .91, indicating the reliability of the questionnaire. Cronbach’s alpha value for the individual scales and their respective 95% confidence intervals were as follows: skills, .93; instructor efficacy, .92; career determination, .87; external motivation/future, .88; confidence, .87; personal adjustment, .86; concentration/self-regulation, .86; socializing, .84, internal motivation/interest, .89; and lack of anxiety, .77.

*Data Analysis*

The statistical analysis of the study was conducted using SPSS version 25 for Windows. The significance level was set to 5%. Means and standard deviations (SD) for continuous variables and frequencies with percentages for categorical variables were used to summarize the characteristics of the samples. Pearson’s correlation was conducted to explore the association between mental well-being and academic performance.

**Results**

The results are presented in this section in three parts. First, the variation in the respondents’ sociodemographic variables by field is presented. The cumulative grade point average (CGPA) was then summed considering the association between mental well-being and the quality of graduate students’ relationships. Finally, students’ mental well-being was investigated to ascertain the relationship between mental well-being and academic performance in the final-year.

*Sociodemographic Characteristics*

Table 1 presents all the sociodemographic characteristics of the respondents. The sociodemographic factors accounted for 53.1% of male characteristics and 46.9% of female characteristics. The sample’s age distribution was as follows: 20–24 years (N = 208, 92%); 25–29 years (N = 18, 8%). The students enrolled in the sports management program (SR241) accounted for 52.6%; students enrolled in the sports science program (SR243), 45.6%; and students enrolled in the health and fitness program (SR243), 1.8%. The last program is only available at the Arau campus.

**Table 1.** Sociodemographic characteristics

Socio-demographic	Frequency	Percentage
<i>Gender</i>		
Male	120	53.1
Female	106	46.9
<i>Age</i>		
20-24 years	208	92.0
25-29 years	18	8
30-34 years	0	0
35 years and above	0	0
<i>Current Program Enrolled</i>		
SR 241 (Sports Management)	119	52.6
SR 243 (Sports Science)	103	45.6
SR 245 (Health and Fitness Management)	4	1.8
<i>Allowance Received from Family</i>		
Less than RM500	111	49.1
RM501 – RM1000	43	19.0
RM1001 – RM1499	41	18.2
RM1500 – RM1999	12	5.3
RM2000 – RM2499	5	2.2
RM2500 and above	14	6.2
<i>Campus</i>		
Shah Alam	64	28.3
Arau	29	12.8
Jengka	30	13.3
Samarahan	21	9.3
Seremban 3	82	36.3

*Cumulative Grade Point Average (CGPA)*

The researchers determined which respondent had the highest CGPA. Each respondent has a different grade point average. As presented in Table 2, the majority of the respondents (67.7%) had a CGPA of 3.0–3.49. The least common were CGPA of 2.49 and below, represented by only four respondents (1.8%) of the overall sample. The respondents’ CGPA is presented in the table below.

**Table 2.** Cumulative grade point average (CGPA)

CGPA	Frequency	Percentage
CGPA 2.49 and below	4	1.8
CGPA 2.5 – 2.99	40	17.7
CGPA 3.0 – 3.49	153	67.7
CGPA 3.5 and above	29	12.8

*Academic Performance*

To study the final-year students’ academic performance, descriptive statistics such as mean and standard deviation were used to determine which domains accounted for the majority of the students’ academic success as presented in the table 3 below. *External motivation* ( $M = 5.68, SD = .77$ ), *Confidence in abilities* ( $M = 5.45, SD = .66$ ), and *Skills* ( $M = 5.34, SD = .81$ ) were listed as the top three domains accounting for students’ academic success. Meanwhile, the least accounted domain for students’ academic success was *Socializing* ( $M = 3.79, SD = 1.62$ ).

**Table 3.** Domains of academic performance

Domains of Academic Performance	Mean	Std. Deviation
External Motivation Future	5.68	.77
Confidence in Abilities	5.45	.66
Skills	5.34	.81
Internal Motivation Interest	5.23	.69
Lack of Anxiety	5.22	1.33
Career Decidedness	5.05	.91
Concentration and Self-Regulation	4.83	.79
Personal Adjustment	4.51	1.44
Instructor	4.23	1.21
Socializing	3.79	1.62

*Mental Well-Being*

The mental well-being of the final-year students was analyzed using descriptive statistics, such as mean and standard deviation, to identify which domains accounted for the bulk of students’ academic success. *Spiritual mental well-being* ( $M = 4.48, SD = .40$ ), *Eudaimonic mental well-being* ( $M = 3.99, SD = .47$ ), and *Hedonic mental well-being* ( $M = 3.96, SD = .52$ ) all significantly contributed to the explanation of the three categories. The findings are summarized in Table 4.

**Table 4.** Domains of mental well-being

Domains of mental well-being	Mean	Std. Deviation
Spiritual mental well-being	4.48	.40
Eudaimonic mental well-being	3.99	.47
Hedonic mental well-being	3.96	.52

Table 5 summarizes the findings of a descriptive survey of the current mental well-being of the final-year students. The findings indicated that a vast majority of final-year students (99.6%) enjoy a high degree of mental well-being, whereas only 0.4% are likely to be suffering from depression

**Table 5.** Descriptive statistics on present mental well-being

Present mental well-being	Frequency	Percentage
Probably Depression (40 or fewer points)	1	0.4
Possible Depression (41 – 44 points)	0	0
Average Mental Well-being (45 – 59 points)	0	0
High Mental Well-being (60 and above points)	225	99.6

*Mental Well-Being and Its Association with Academic Performance*

Pearson’s correlation coefficient was employed to test the hypothesis on the relationship between the mental health and academic achievement of final-year students. All elements passed the normality test. As presented in Table 6, the data indicated a positive moderately linked relationship,  $r(226) = 0.356, P < 0.05$ . With that, the null hypothesis was rejected.

**Table 6.** Mental well-being and its association with academic performance

		Academic Performance
Mental well-being	Pearson's correlation	0.356
	Sig (2 tailed)	0.001
	N	226

\*Correlation is significant at the 0.05 level (two-tailed)

### Discussion

In this study, the male-to-female ratio was almost equal due to a predetermined ratio of male-to-female responses. Most individuals were aged between 20 and 24 years, as this is the typical age at which individuals pursue a bachelor's degree. Most respondents (49.1%) received less than RM500 allowance from their family.

In terms of mental well-being, the final-year students at the Faculty of Sports Science & Recreation, UiTM, experienced a high level of spiritual well-being, followed by almost equal experience of eudaimonic and hedonic well-being. This indicates that students in their final-year highly rely on spiritual well-being to cope with the stress of overall physical and mental health to accomplish their studies. Their preference for the items "I believe I am blessed by God," "I believe God is the best helper," "I believe my problems can be easily solved if I am close to God," "I believe I am guided by God," and "I find it easy to pray" are examples of the spiritual well-being evidence. This is consistent with the findings of Ziapour, Khatony, Jafari, and Kianipour (2017), who discovered that students in their late academic semesters had greater spiritual degree of mental well-being. However, the finding of the current study contradicted those of Zubairu and Sakariyau (2016), which stated that there is no correlation between spiritual well-being and students' overall mental well-being, as well as their ability to cope with daily stress and endeavors in university life because everyone has unique God-given talents in various spheres of life that extend beyond simply achieving good grades. However, the study conducted by Zubairu and Sakariyau (2016) included students from all semesters who had excellent academic grades (CGPA of 3.00 or higher).

In relation to the academic achievement, this study identified that the domain of external motivation/future, which is the respondents' mentality toward their future, mainly accounted for the final-year students' academic success. The final-year students at the Faculty of Sports Science & Recreation, UiTM, assumed that if they study hard and do well in their studies, they can achieve success in the future. This finding is consistent with that of Maharaj, Blair, and Chin Yuen Kee (2018), who stated that individuals appeared to be inspired by an enhanced likelihood of desired possible occupations and likely to remain motivated by a combination of goal-oriented behavior and family encouragement. In addition, Davids (2015) claimed that individuals with a high level of generalized external motivation typically set higher goals than those with low demand for achievement. However, the findings that identified socializing as the least-effective domain accounting for the final-year students' academic success contradicted that of a previous research by Ainin, Naqshbandi, Moghavvemi, and Jaafar (2015), which stated that the socializing domain is critical because people evaluate how others can assist them in achieving their goals while establishing and maintaining relationships with others. In addition, Ainin et al. (2015) asserted that building and maintaining satisfying relationships with peers is a necessary component of socialization. Communication with peers and the development of ties can foster mutual support and a feeling of identity, enabling them to appreciate the values, knowledge, and growth of commonality and social approbation among peers. Thus, previous research indicated that socializing has a beneficial effect on academic performance, whereas a recent study among UiTM respondents indicated that external motivation for the future is more significant than associating with others throughout their final years. The respondents will eventually consider what they want to do after graduation, and the better their academic achievement or results, the brighter their future. As a result, this provides them with the drive they require to earn a passing grade. Opposed to socializing, even though the fact that the comments presented by Ainin et al. (2015) were quite reasonable, the respondents of the current study considered it as a distraction.

In terms of the relationship between mental well-being and academic performance, this study discovered a moderately positive significant relationship between mental well-being and academic performance among final-year students of the Faculty of Sports Science & Recreation, UiTM. This result indicated that final-year students must maintain a happy and healthy mental state to sustain a stable and effective academic performance. As revealed by Cilar et al. (2019), the foundation of a healthy well-being is a healthy mental health. As stated in their publication, mental well-being lays the groundwork for an individual's optimal psychological development, as well as the development and maintenance of social connections, successful learning, and physical health. Mental health impairs a person's social and economic achievements throughout his/her life; moreover, it is a critical component of society, as it can affect a student's education, efficiency, peace of mind, and stability in his/her living conditions. In addition, Poots and Cassidy (2020) claimed that the academic performance of students significantly decline, particularly if the students are in their final academic year, have poor mental health, and have an all-time high stress levels. Furthermore, a previous study by Bordbar, Nikkar, Yazdani, and Alipoor (2011) found that students with greater mental well-being demonstrate higher levels of academic success.

### Conclusion

This study demonstrated that most final-year students of the Faculty of Sports Science & Recreation, UiTM, highly preferred the domain of spiritual well-being in managing daily stress, maintaining discipline, and coping with daily struggles in universities, compared with the domain of eudaimonic or hedonic well-being. As the main domains of academic performance, the external motivation for the future and confidence in abilities and skills highly motivate the final-year students to achieve excellent academic performance. This indicates that the final-year students of the UiTM believe that if they put in extra effort and strive to do well in their studies, they can achieve success in the future. Meanwhile, socializing is not considered as the best domain for academic achievement because it is a waste of time, and the results indicated that the more socializing a person does, the poorer his/her academic performance is. It could be simplified that there is a moderately good association between the final-year students' mental health and academic achievement. Mental well-being can be maintained if spiritual well-being is high, and academic success can be maximized if students work diligently in their studies for the future. However, there are a few minor gray areas that the institution should address to help students maintain healthy mental well-being. Additional research is required to understand the ways to improve students' mental well-being and the elements that contribute to students' positive mental well-being.

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