



**THE IMPACT OF WELLNESS DIMENSIONS
ON THE ACADEMIC PERFORMANCE OF UNDERGRADUATES
OF GOVERNMENT UNIVERSITIES IN SRI LANKA**

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Abstract:

Wellness is a concept that comes from the early decades of the twentieth century. From several wellness dimension models researchers have identified six main dimensions of wellness. They are Physical Wellness, Social Wellness, Emotional Wellness, Intellectual Wellness, Spiritual Wellness, and Occupational Wellness. This study demonstrates the impact of wellness dimensions on the academic performance of undergraduates of government universities in Sri Lanka. Out of fifteen government universities in Sri Lanka, undergraduates from the University of Sri Jayewardenepura, University of Colombo, University of Kelaniya and University of Peradeniya were selected as the sample. Data were collected based on simple random sampling method using a five-point Likert scale questionnaire. Collected data were analyzed by means of structural equation modeling using Amos software. According to the findings of this study, wellness dimensions have an impact on the academic performance of government university undergraduates in Sri Lanka.

Keywords: academic performance, university undergraduates, wellness, wellness dimensions

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1. Introduction

Wellness is a concept that came into being in the early part of the twentieth century. Now it is an industry with a turnover of a trillion dollars a year that is growing at a faster rate than the global economy (GWI, 2016). According to NIMH (2017) and the Alliance for a Healthier Generation (2017), most of the community groups such as administrators of educational institutions, health agencies, communities and parents share the common goal of supporting the link between wellness and improved academic performance of undergraduates as well as school going students. The students who are physically active, which is a dimension of wellness, have improved cognitive performance and will perform better academically (First Call, 2017). It is well proved that better physical fitness levels help students to achieve higher grades in their academic career.

The Wellness of an individual is manifested through several dimensions such as physical wellness, social wellness, intellectual wellness, spiritual wellness, emotional wellness and occupational wellness (Hettler, 1977; Sweeney & Witmer, 1991).

Bill Hettler, president of the National Wellness Institute's board of directors, defined wellness as an active process through which people become aware of and make choices towards a more successful existence (1977).

Ahamad et al. (2019) highlighted the following matters. Obesity has become a noteworthy issue in Southeast Asia, particularly in Malaysia, where the report of the National Health and Morbidity Survey of 2015 drew attention to the fact that the nation has the highest number of obese people in the area and that it is increasing. As of late, it was seen that the web-based life could be utilized for adopting a more advantageous way of life. It is accepted that to induce individuals to engage with online networking or any health framework, social help is significant. In any case, a look into the comprehension of social help from the point of view of framework configuration is as yet deficient. This examination expects to fill these gaps and offer a better comprehension of social help through Persuasive System Design (PSD). The objectives of this examination are, (i) to distinguish the social help components inside the enticing structure components, and (ii) to subjectively confirm the social bolster components of Malaysian well-being in Internet-based life. Subjective information assortment was directed through online networking content perceptions and centered on conducting interviews with chosen respondents. Five PSD components in social help were identified. They are, social learning, social help, social examination, acknowledgment, and regulating impact. The importance and centrality of these components with respect to the well-being and health inspiration among Malaysians were additionally recognized.

In addition, M. Mahdi (2019) researched the attitude of university undergraduates towards web-based life. He also analyzed the relationship between undergraduates' utilization of the Internet and their GPA.

Shabeena and Balagi (2020) conducted a research in Chennai, India on tracing the patterns of social media usage by MBA students and the impact these patterns had on

their academic performance. They found that the students who spent more time on social media had impaired wellness and scored poorly on academic performance.

Bill Hettler, president of the National Wellness Institute's board of directors, defined wellness as, "An active process through which people become aware of and make choices towards a more successful existence." Hettler (1977) introduced a wellness model with six dimensions representing emotional wellness, spiritual wellness, intellectual wellness, social wellness, physical wellness, and occupational wellness. Thus, the model is also known as the 'six dimensions of wellness' model.

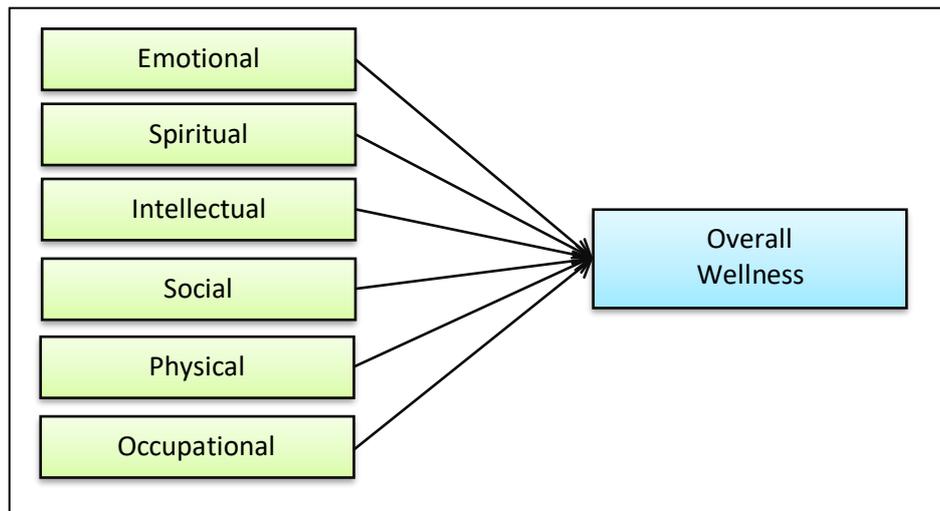


Figure 1: Six dimensions of wellness model
(Source: Hettler, 1977)

1.1 Emotional Wellness

The passionate measurement refers to acknowledgment of one's sentiments. It incorporates a positive equalization ranging from a wonderful to terrible effect and an intellect assessed on fulfillment with life as a rule (Langeland, 2014). Emotional health reflects how much one feels positive and excited about one's self and life. It refers to the ability to deal with one's sentiments and feelings, including the reasonable appraisal of one's limitations, sense of self-sufficiency, and capacity to cope successfully under pressure. The well individual conducts fulfilling dealings with others. Attention to feelings and tolerating a wide range of emotions in oneself as well as in other people is crucial to mental health. In keeping with the ideas of well-being, the individual in question would have the capacity to communicate sentiments liberally and control emotions successfully. One should have the ability to make individual decisions and choices depending on one's blend of sentiments, contemplation, reasoning, and conduct. One should live and work independently while understanding and getting along with others. It is important to help others and in turn value their help. One should build up associations with others on the principle of shared responsibility, trust and regard. One should take on difficult tasks, face challenges and perceive struggle as being conceptually sound. Dealing with one's life by observing good manners, and taking responsibility for

one's actions, will assist that person by making his life an invigorating and cheerful experience. Passionate well-being follows these fundamentals. It is smarter to know about and acknowledge one's sentiments than to deny them. It is smarter for one to be idealistic in dealing with life than being skeptical.

1.2 Spiritual Wellness

The otherworldly measurement assesses an individual's quest to feel important and be recognized by others. In other words, otherworldly well-being has been characterized as the condition of being in a position where the individual can manage everyday life issues in a way that prompts others to acknowledge his abilities, which imbues within him a feeling of satisfaction (Dhar, Chaturvedi, & Nandan, 2013). It embodies a sense of sincere thankfulness for the profundity and meaning of life and the common powers that exist within man. A man's search will be portrayed best by a serene concordance between his close to home sentiments and the harsh and rough stretches he has to traverse on his way. While travelling along the way, he may feel numerous negative sentiments like uncertainty, despair, dread, frustration and separation as well as positive sentiments like delight, bliss, joy and freedom. These are immeasurably significant encounters that are part of his hunt and will be shown in the framework he will adjust to carry importance to his reality. He will realize he is turning out to be profoundly well when his activities become increasingly in line with his convictions and qualities, bringing about a "world view." Otherworldly health follows these precepts, *"It is smarter to contemplate the importance of life for ourselves, and to be tolerant of the convictions of others than to close our brains and become narrow minded. It is smarter to live every day in a manner that is consistent with our qualities and convictions than to do it differently and feel false to ourselves."*

1.3 Intellectual Wellness

The scholarly measurements assess one's innovative, invigorating and referenced exercises. A well individual grows his insight and abilities while finding the potential for imparting endowments to other people. Utilizing scholarly and social exercises in the study hall, the HR and learning assets accessible inside the college network and the external network, a well individual loves scholarly development and mental stimulation. Traversing a Wellness path, he will investigate issues calling for critical thinking, inventiveness and learning. He will invest more energy by seeking knowledge through reading and understanding books, magazines and papers, while staying up-to-date with current issues and thoughts. As he builds up his scholarly interests he will effectively endeavor to extend and challenge his psyche with innovative undertakings.

1.4 Social Wellness

The Social wellness measurement helps by adding to one's condition and network. It deals with the relationship with others and nature. As an individual practices a healthy way of life, he will turn out to be progressively mindful of its significance in the public eye due to its effect on various situations.

The individual will take on a functioning role in improving the reality by adopting a healthier lifestyle and engaging in better correspondence with the people around him. Individuals effectively scan for approaches to protect the magnificence and parity of the nature along the pathway as they develop the ability to make determined decisions to improve individual connections and significant kinships. They manufacture a predominant living space and network to ensure social health and follow these tenets: It is smarter to be part of the normal government network than to work in isolation. It is smarter to live amicably with others than to engage in clashes with them.

1.5 Physical Wellness

Physical well-being means proper functioning of what is important for day-to-day body activity. As an individual follows the healthy way of life, he invests in energy building physical activities, perseverance and adaptability. The physical well-being measurement includes individual attention and care for minor sicknesses and specialist care when particular clinical consultation is required. By following the health route, individuals will have the capacity to assess their own physical condition and perceive their body's warning signs. Individuals will know and value the relationship between sound nourishment and the performance of their bodies. The physical states of looking great and feeling good confer profound advantages such as boosting confidence, restraint, assurance and ability to read a compass. Physical well-being follows these rules: it is smarter to improve the state of well-being as opposed to those that harm it. It is certainly more advantageous to be slim and fit than to be flabby and run out of breath quickly.

1.6 Occupational Wellness

The Occupational wellness measurement assesses individual fulfillment and advancement in one's life through work. At the focal point of word related well-being is the reason that word related improvement is identified with one's disposition about one's work. Travelling towards one's word related health, one will contribute his exceptional blessings, aptitudes and gifts to work that will be both significant and fulfilling. One will pass on his qualities through his contribution by exercises that are satisfying to him. The decision related to one's calling, work fulfillment, vocational aspirations, and individual execution are immensely significant segments of a person's landscape. Word related well-being follows these tenets: It is smarter to pick a vocation that is compatible with one's own qualities, interests and convictions than to choose one that is unrewarding to one. It is smarter to create useful and transferable abilities through organized contributions than to stay inert and uninvolved.

2. Problem Statement

Well-being is an idea that has been around for a very long time. At present the well-being industry is growing faster than the worldwide economy and its turnover amounts to a trillion dollars a year. Innovative developments throughout the world are making well-

being related issues better known as a result of people's heavy use of computers and the web (Misra, Cheng, & Genevie 2016). Further, some studies find that communication technologies have a positive effect on social relations among elders (Bavernschuster, Falck & Wossmann, 2014).

Other studies have found that the more time people spend using information technologies for virtual interactions, the less time they devote to other social activities and, in particular, to face-to-face social interactions (Mumford & Winner, 2010). Rolondi (2017) observes that monological technologies such as radio and television allow only a unidirectional communication flow, without any possibility of interaction. Several studies have shown that the smartphone can impact people's relational life and reduce their social wellness. The animation in life can also be lost, because the use of these devices can diminish the ability to appreciate recreation (Jankovic, Nikolic, Vukonjanski, & Terek, 2016). That demonstrates smartphone usage can diminish the individual's social, otherworldly and scholarly well-being as well. Be that as it may, literature proposes just a few measurements on prosperity/ wellness, such as physical health, social well-being, enthusiastic health, scholarly well as otherworldly well-being and word related health. There is the off chance that the utilization of innovation and dependence via web-based networking media in the advanced business world could cause numerous issues relating to the prosperity of a populace. Among the populace influenced by the undesirable utilization of modern innovations, university undergraduates are the leading example. As per research findings, university students need to perform well in the scholastic field and their well-being is connected with the academic performance they actually attain.

Even though university undergraduates' maintenance and scholarly achievement are top needs of colleges, the undergraduates often do not perform well. Their state of wellness often proves to be a factor in this.

Current study intends to validate the importance of having a balanced standard of wellness and empirically examine the wellness dimensions against the academic performance of government university undergraduates in Sri Lanka.

2.1 Objectives of the Study

The purpose of this study is,

- 1) To determine the effect of wellness dimensions on the academic performance of government university undergraduates.
- 2) To identify the contribution of the wellness dimensions in developing the overall wellness.

2.2 Research Questions

Based on the research objectives the research questions were developed. Research questions are,

- 1) Is there an effect of wellness dimensions on the academic performance of government university undergraduates?

- 2) What is the contribution of wellness dimensions towards developing the overall wellness?

3. Research Method

There are 15 government universities in Sri Lanka. Population of this study refers to a group of people who are government university undergraduates in Sri Lanka. The six dimensions of wellness are physical, social, spiritual, emotional, intellectual, and occupational. The researcher intended to examine the effects of these wellness dimensions on the academic performance of the government university undergraduates in Sri Lanka. Out of the 15 universities, samples were drawn from only four universities. They are the Universities in Colombo, Sri Jayewardenepura, Kelaniya, and Peradeniya. The reason for choosing them was that they are the universities with the highest student enrolments. Simple random sampling method was chosen for the study.

The study was conducted using primary and secondary data. Primary data were collected via questionnaires with five-point Likert scales. They ranged from one representing 'strongly disagree' to five representing 'strongly agree'. Neutral was represented by number three. Secondary data were gathered from relevant literature, websites and textbooks. One thousand and twenty (1020) questionnaires were distributed among the students and one thousand and ten questionnaires were returned. After rejecting outliers and the incomplete questionnaires, 984 were available for the analysis. Structural Equation Modeling was used to analyze the data.

3.1 Conceptual Framework

According to the adopted method, which was based on past theoretical and empirical literature, the conceptual framework was developed. It was used to verify the impact of wellness dimensions on the academic performance of undergraduate of four government universities in Sri Lanka. After referring to the literature, it was decided that the six dimensions of wellness model is the most suitable model to use as a foundation for the conceptual framework of this study. Six exogenous latent variables and one endogenous latent variable were contained in the conceptual framework. The exogenous variables are intellectual wellness, occupational wellness, spiritual wellness, emotional wellness, social wellness, and physical wellness while the endogenous variable is represented by academic performance.

3.2 Research Hypothesis

Tentative yet testable statements that predict what can be found in this study using the collected empirical data are presented below as the hypotheses of the study. Based on the conceptual framework, a model has been created to analyze the impact of wellness dimensions on the academic performance of undergraduates in the government universities of Sri Lanka.

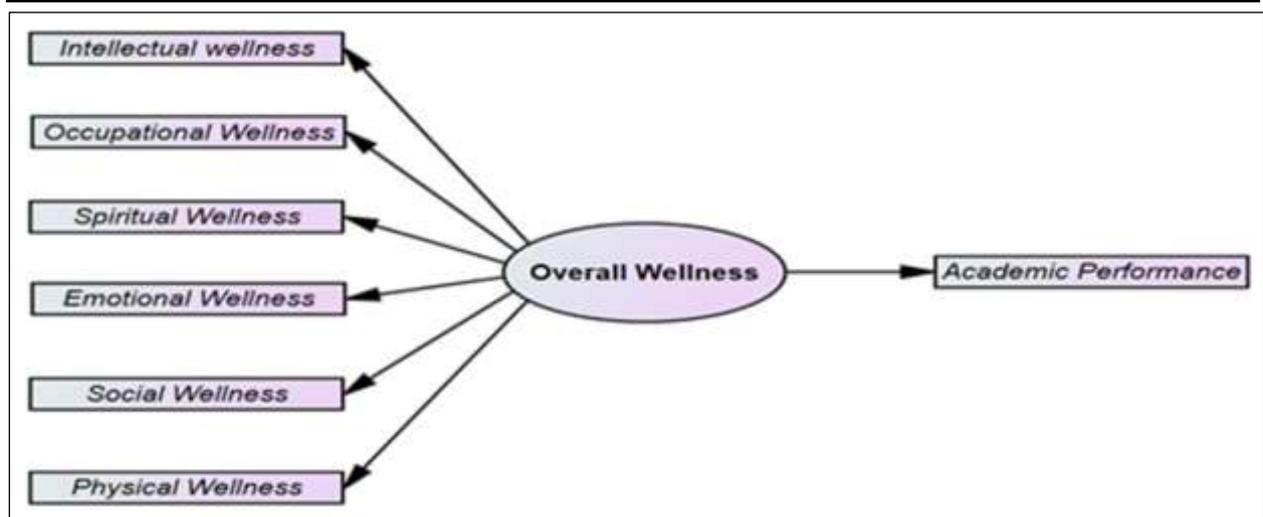


Figure 2: Conceptual framework

H1: Overall wellness has a direct and significant effect on academic performance.

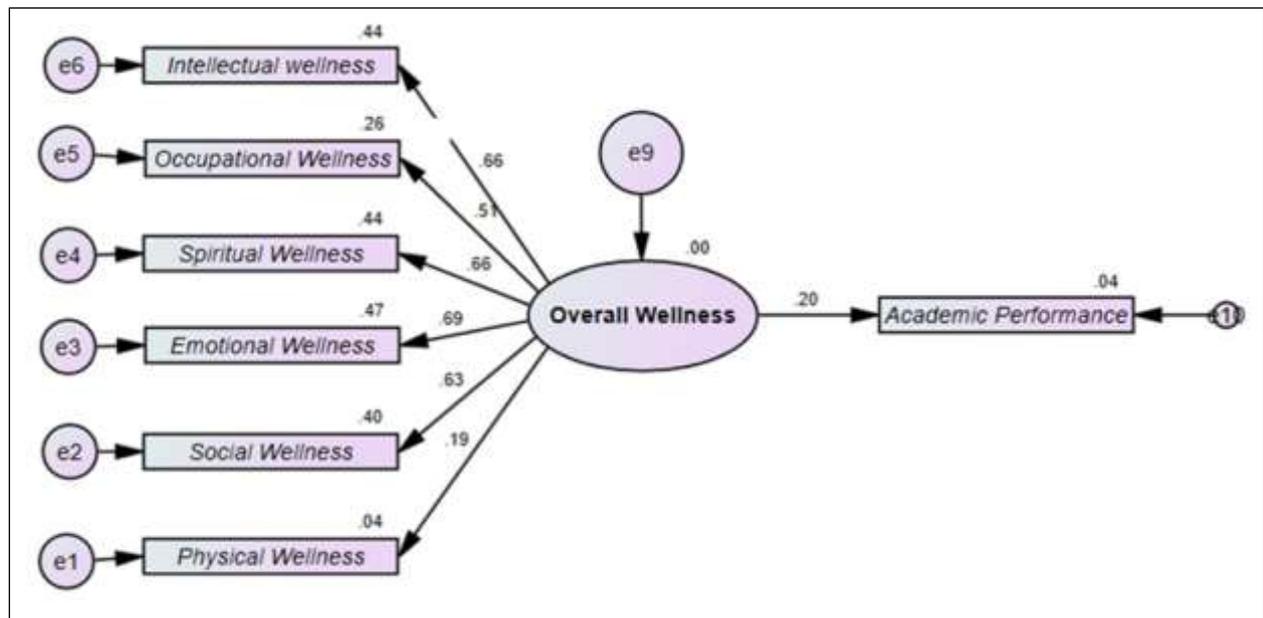


Figure 3: Modeling the overall wellness as a moderator in the relationship between academic performance and the wellness dimensions

In the field of institutional research, AMOS Graphic is employed to study the significance of overall wellness in a university as a moderator in the relationship between students' academic performance and the wellness dimensions. The researchers have two latent constructs, namely overall wellness and academic performance. Let academic performance be a latent endogenous construct while overall wellness is a latent exogenous construct. The overall wellness has six indicators and the indicators for academic performance were computed. The causal effect of academic performance on overall wellness is drawn using a single-headed arrow as shown in Table 1: Hypothesis testing for the causal effect of

overall wellness on academic performance

The estimated coefficient beta, its standard error, critical region and probability value are given in **Error! Reference source not found.**. The information given would be adequate for the researcher to test the hypothesis for regression coefficient beta.

Table 1: Hypothesis testing for the causal effect of overall wellness on academic performance

		Estimated β	S.E.	C.R.	Probability
Academic performance	<--- Overall wellness	0.204	0.212	3.943	***

The probability of getting a critical ratio of 3.943 as an absolute value is less than 0.001. In other words, the regression weight for academic performance in the prediction of overall wellness is significantly different from zero at the 0.001 level (two-tailed). Thus, the above research hypothesis is supported. It means that H1: Overall wellness has a direct and significant effect on academic performance is accepted.

Furthermore, estimated regression value indicated that when the overall wellness goes up by 1 standard deviation, academic performance goes up by standard deviation of 0.204. It can be interpreted as a percentage in which overall wellness has a 20.4% impact on academic performance.

H2: There is a variation in the contribution of the six wellness dimensions to develop the overall wellness.

Overall wellness is a latent construct (represented by the ellipse). This latent construct is measured using six items, namely Intellectual wellness, Occupational wellness, Spiritual wellness, Emotional wellness, Social wellness, and Physical wellness (represented by rectangles with their observed score). In Figure 3, rectangles are the response items for the construct while e1 to e6 are their respective measurement errors. The data are inserted into the model through the “click-and-drag” procedure.

Figure 3 presents the factor loading for each item in a measurement model that is used to measure the latent construct’s workload. The factor loading for a particular item is shown near the arrow pointing to the respective item, while the value shown above for each response item is the squared multiple correlation or R^2 for that particular item.

Any item having a factor loading of less than 0.6 and an R^2 of less than 0.4 indicates their lower contribution to the measurement model of a construct. However, the researcher was able to identify two factors, namely Physical wellness (factor loading = 0.19, and $R^2 = 0.03$). Occupational wellness (factor loading = 0.53, and $R^2 = 0.28$) had the lower contribution factors based on the above-mentioned limitation. Furthermore, Table 2 and Table 3 illustrate their contributions in the measurement model.

Accordingly, each of these factors, namely Emotional wellness, Intellectual wellness, Spiritual wellness, Social wellness, Occupational wellness and Physical wellness respectively, can affect Overall wellness in descending order of influence.

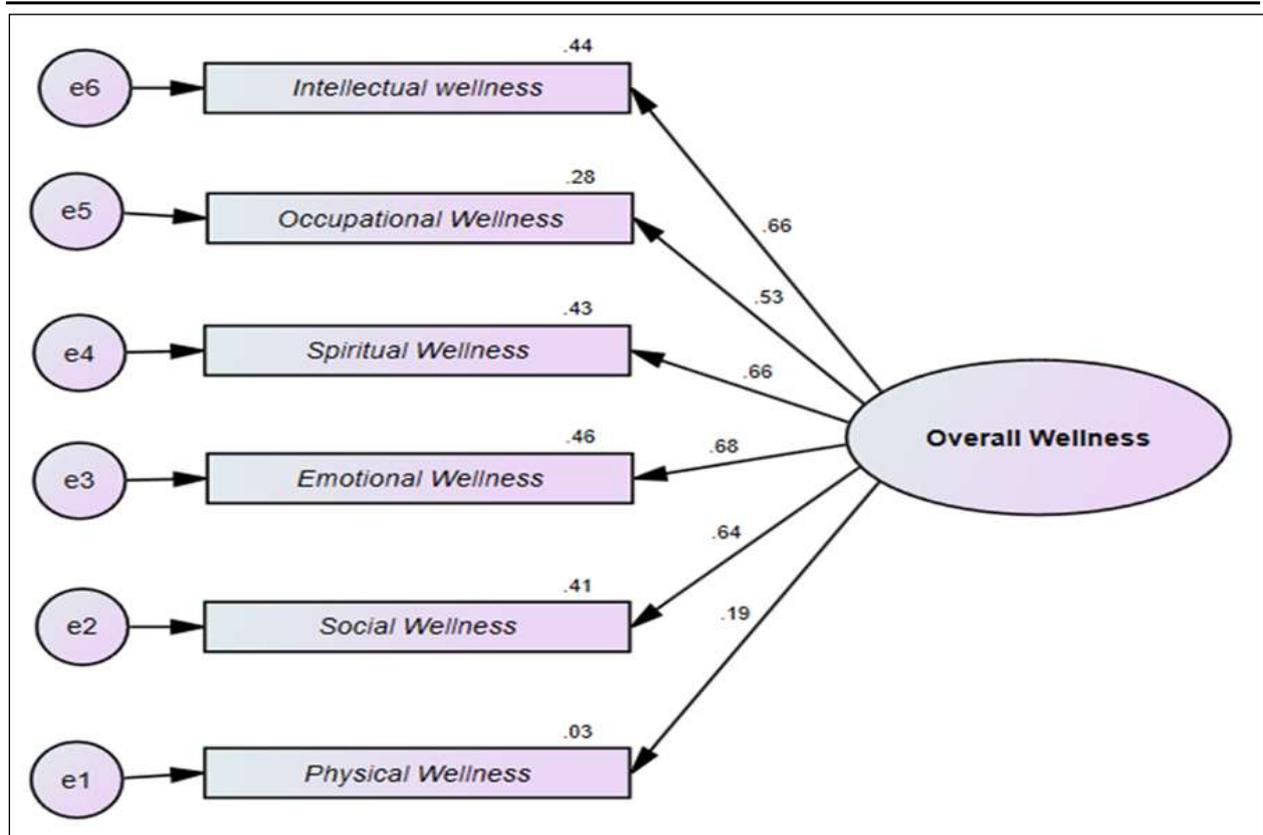


Figure 4: Factor loading for each wellness dimension

3.3 Level of significance for regression weight

Table 2: Standardized regression weights of individual dimensions for overall wellness

			Estimate
Emotional wellness	<---	Overall wellness	0.687
Intellectual wellness	<---	Overall wellness	0.663
Spiritual wellness	<---	Overall wellness	0.660
Social wellness	<---	Overall wellness	0.632
Occupational wellness	<---	Overall wellness	0.515
Physical wellness	<---	Overall wellness	0.193

3.4 Squared Multiple Correlations

Table 3: Individual squared multiple correlation weights

	Estimate
Emotional Wellness	0.46
Intellectual Wellness	0.435
Spiritual Wellness	0.43
Social Wellness	0.41
Occupational Wellness	0.28
Physical Wellness	0.03

In addition, individual contribution of the dimensions to the latent variable called overall wellness is further illustrated in above table. In absolute terms, the contribution to the overall wellness factor is clearly over 50%, with the exception of physical wellness (19.3%). A description of AMOS results are given below.

- When **Overall wellness** goes up by 1 standard deviation, **Physical wellness** goes up by 0.193 standard deviations.
- When **Overall wellness** goes up by 1 standard deviation, **Social wellness** goes up by 0.632 standard deviations.
- When **Overall wellness** goes up by 1 standard deviation, **Emotional wellness** goes up by 0.687 standard deviations.
- When **Overall wellness** goes up by 1 standard deviation, **Spiritual wellness** goes up by 0.66 standard deviations.
- When **Overall wellness** goes up by 1 standard deviation, **Occupational wellness** goes up by 0.515 standard deviations.
- When **Overall wellness** goes up by 1 standard deviation, **Intellectual wellness** goes up by 0.663 standard deviations.

4. Conclusion

From the findings of this study it can be said there is an effect of wellness dimensions on the academic performance of government university undergraduates in Sri Lanka. Also, this study found how the six individual wellness dimensions add up to make the overall wellness. Thereby, if an undergraduate endeavors to improve his health scores, he can have a strong body and a sharp brain. From that it is clear that undergraduates' academic performance will get enhanced. Keeping this in mind, policymakers can introduce new health programs to improve university undergraduates' level of well-being. The university students will then be better equipped to achieve a higher level of academic performance. The administrators and educationists can introduce various types of health programs from the first year to the final year to improve the academic performance of the undergraduates. That will be a gift to the nation as there will be more highly accomplished youth to serve the country and the people.

5. Limitations of the Study and Suggestions for Future Research

The findings of the current study could also be used to point to new directions for future research endeavors. This study employed quantitative methods to investigate the relationship between wellness and academic performance. A follow-up to this study could also include the qualitative method as that would provide a clearer picture of this relationship.

In the current study, only the data collected from four universities were reviewed. A follow-up study could include all or most of the other government and private sector universities. This would solidify or discount the current findings so that institutions may

feel more confident of any changes made based on the results. It is quite possible that the relationship between wellness and academic performance might change over time, in which case programming adjustments could be made accordingly.

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