

SHAPING EMOTIONS THROUGH EDUCATION IN SELANGOR, MALAYSIA

Astri Yulia^{1*}, Nor Azilah Husin², Fahmi Ngah³, Amirul Syafiq Mohd. Ghazali⁴, Yunisrina Qismullah Yusuf^{5*}

¹Senior Lecturer, Language Education Department, Universiti Selangor, Malaysia; ²Associate Professor, Faculty of Business and Accountancy, Universiti Selangor, Malaysia; ³Managing Director, Smart Selangor Delivery Unit, MBI, Malaysia; ⁴Lecturer, Faculty of Business and Accountancy, Universiti Selangor, Malaysia; ⁵Lecturer, Department of English Education, Faculty of Teacher Training and Education, Universitas Syiah Kuala, Banda Aceh, Indonesia.
Email: ^{1*}dr.astri@unisel.edu.my, ²nor_azilah@unisel.edu.my, ³ssdu@mbiselangor.com.my, ⁴amirul@unisel.edu.my, ^{5*}yunisrina.q.yusuf@unsyiah.ac.id

Article History: Received on 25th March 2020, Revised on 14th April 2020, Published on 15th May 2020

Abstract

Purpose of the study: The purpose of this study is to determine the role of education in shaping the well-being of the people in Selangor, Malaysia. Specifically, we traced the linkages between education and three well-being attributes: economic, health, and emotion.

Methodology: To collect the data, this study distributed a survey questionnaire to 1304 people in 12 municipalities of Selangor, Malaysia. The questionnaire recorded information about the people's agreement on a variety of statements related to well-being and education. Besides, demographic information was also collected for demographic profile analysis. To analyze the data, we utilized the SmartPLS3 to test the SEM-PLS model.

Main Findings: The SEM-PLS results revealed education significantly linked with emotions. The main aspect of education responsible for shaping emotion is access to good education providers in their area. We traced the number of books at home that were positively associated with their emotions. To our surprise, the results showed no significant effect of education on the economic and health among Selangorians.

Applications of this study: This study is relevant for the Malaysian society, especially the Selangorians. Specifically, this study contributes to education policymaking on ensuring people's access to quality education which can enhance their quality of life. More attention should be given to education as this study has documented that education shapes one's emotion. Having a stable emotion will indirectly lead to better citizens.

Novelty/Originality of this study: Though contradicting established research, this finding is reflective of the behavior and trends of the current generation. Today, people do not rely on formal education to strive for success. A healthier lifestyle could also be a product of the health-aware community more than the result of education. However, living with a good economy and health could be meaningless if our emotional state is not good. Therefore, this study concludes that to have a happier community, authorities need to ensure a good education system is available to serve and educate the people and their children.

Keywords: Education, Shaping Emotion, Education Access, Quality of Life, Well-being.

INTRODUCTION

A good quality education enhances thinking development, strengthens knowledge, develops a personality, changes attitudes, trains specific skills, and develops communities. All these functions of education are important to achieve success in life. According to the [Economic and Social Research Council \(2014\)](#) (hereafter, ESRC), education is one of the clearest indicators of life outcomes such as employment, income, and social status. Today, the society has added an emphasis on another important part of life; that is being happy and fulfilled. This feeling is usually observed through several well-being indicators.

Nevertheless, the link between education and well-being has not been solidly established through empirical research. one's achievement is indeed influenced by the well-being [Howell \(2016\)](#) and that education is an indicator of achievement. Furthermore, other studies have empirically investigated the relationship between education and the attributes of well-being. For example, [Hanson, et al. \(2016\)](#) found that peer-learning had a significant impact on the pupil's psychological well-being while education, in general, was reported to have a moderate influence on the student's well-being state. Another study, which investigated youth in Australian schools coping with psychological issues, found that the role of education needs to be enhanced by outdoor programs to support the students needing psychological aids ([Rose, et al., 2018](#)). Other studies that looked at communities, in general, suggested that education is a key factor in one's contribution to society and his well-being ([ESRC, 2014](#); [SaviCakar & Tagay, 2017](#)). However, it is not clear which aspects of well-being are directly influenced by education. The absence of the direct linkage between education and well-being warrants for a specific investigation on the matter.

Therefore, specifically, this study investigated the effects of education on the well-being domains (i.e., economic, health, and emotion).

LITERATURE REVIEW

Education is a fundamental part of one's life, and It has led to influence many aspects of one's future success. Importantly, success needs to be accompanied by well-being to ensure that physical and psychological needs are fulfilled. In an attempt to establish the linkage between education and well-being, the present study stemmed from the social capital theory. Besides, we reviewed literature that investigated the attributes of well-being and their relations with education.

The Social Capital Theory

The problem addressed in this study stems from the social capital theory which is defined as "...investment in social relations with expected returns" (Lin, 1999, p. 30). The social capital theory holds that individuals interact and socialize intending to gain benefits for themselves. These benefits vary between societies; some expect material profits, others aim to achieve certain social classes, and some others make use of psychological rewards. In the social capital theory, the community plays a very important role for an individual to achieve the targeted profits, such as social position, wealth, power, and reputation (Flap, 1995). It is within the society that one establishes his or her social network. The social capital theory hypothesizes that the larger the network of an individual, the more likely it is for him or her to move up in the structure (Coleman & Snarey, 2011). Education is a factor that can help one build a bigger network and climb the social ladder. Therefore, the stakeholders of the education system, such as the school principals, the teachers, the students, parents, and community are the key personnel of social capital. A good social structure needs to be supported by a quality education system.

In a more holistic social capital model, Lin (1999) suggested that social capital also affects the physical and mental health of an individual within the society. A study by Flint (2011) supported this theory by presenting that schools shape the model of a healthy community where students learn about friendship, co-operation, and diversity. Moreover, West-Burnham, et al.'s (2007) study concluded that communities with high social capital are associated with producing healthy children with desirable outcomes in education. Specifically, West-Burnham et al. (2007) suggested that a community with high social capital is characterized by shared values, sophisticated social networks, a high level of trust, high civic engagement, active rituals, interdependence, and volunteering and community action. All of these characteristics can be shaped through education.

In this study, therefore, we examined the role of education in shaping three social attributes related to well-being (i.e., economic, health, and emotion). Uniquely, this study measured education by looking at the availability of quality education facilities and teachers in the area where our research participants reside. This measurement method is not very common, as normally, education is measured by the level of highest education completed by the participants. However, these measurements contribute values to the development of a community. More importantly, this unique measurement is expected to reveal a new empirical outcome that can be useful for policymakers developing both urban and suburban areas. Besides, new findings can also benefit and enlarge the body of literature, both in education and well-being.

Social Attributes of Well-being: Economic, Health, and Emotion

An educated society is translated into a higher economy (Cooray, 2010). For this reason, many countries capitalize on the development of their education intending to empower their human capital. Human capital is a crucial determinant of productivity and social capital development (Mosey & Wright, 2007). Specifically, Ozturk (2001) suggested that together with health and nutrition, primary and secondary education can raise the productivity of both rural and urban workers; vocational secondary and tertiary education can equip individuals with specific skills and managerial capacity, and the later specifically prepare them to take tole in key institutions for economic development such as the government, law, and financial system. Other research has documented positive associations between education and agricultural productivity (Birdsall, 1993) and technological advancement (Deraniyagala, 1995).

Focusing the investigation on the quantity of education, research has documented its positive association with economic growth (Hanushek, 1995; Krueger & Lindahl, 2001; Mankiw, et al., 1995). Quantity dimension of education is measured through different variables; from the schooling enrolment ratios (Levine & Renelt, 1992; Mankiw, et al., 1995), the average years of schooling (Hanushek & Woessmann, 2008), to literacy rate (Durlaud & Johnson, 1995). However, to our knowledge, none of the above studies specifically addressed the facilities and resources related to education. Importantly, researchers have examined the relationship between education quality and economic growth (Barro, 1999; Hanushek & Kimko, 2000). For example, Hanushek and his colleagues measured the impact of cognitive skills on labor force quality which lead to influencing economic growth. Barro (1999) used students' test scores to represent the education quality. It is very common for educational research to focus on students on both quantity and quality of education while lesser attention was invested in the educational facility and teacher quality.

Another aspect addressed is health. Cutler, et al. (2014) suggested that education can create opportunities for a better health. Center on Society and Health (2015) released its Brief #1 which stated that Americans with more education live longer, healthier lives than those with fewer years of schooling. The real connection between education and health is complex. The relationship is traced through better jobs. It is common knowledge that an applicant with more education is

more likely to employed and secure a job with health benefits. Higher education is also commonly associated with higher wages. Families with higher incomes are more likely to have better access to good health resources and health providers.

Education has also been reported to benefit the psychological well-being. In this study, we measured this aspect through one's emotion. Emotion has a vast amount of definitions within the literature. Emotion is described as a mental feeling or affection (Hornby, et al., 1987), or sudden trouble, temporary agitation caused by an acute experience of fear, surprise, joy, or anything else similar to these experiences (Sinclair, 1990). According to Myers (2004), human emotion involves physiological arousal, expressive behaviors, and conscious experience. Therefore, in this study, we concluded that emotion refers to one's state of feeling due to the change experienced that influences thoughts and behaviors. In the James-Lange Theory of Emotion, it is explained that one's emotional reaction depends on the stimulus that one sees or experiences. In this study, we look at education as a stimulus toward the formation of people's emotions. Therefore, specifically, this study investigated the effects of education on the well-being domains (i.e., economic, health, and emotion). Based on the literature reviewed, this study expected positive linkages between education and all three domains.

METHODOLOGY

To conduct this study, we collected data from 12 municipalities in Selangor by employing the cluster sampling method. Cluster sampling is suitable for research in which the primary sampling units consist of clusters (Lavrakas, 2008). In our study, we categorized our targeted sampling units into clusters (i.e. the 12 municipalities in Selangor), and then collected data based on the municipalities. The data were collected through a survey questionnaire, administered randomly to Selangorians within the selected municipalities. The data collection process took about two months, by employing the numerators. A total of 1500 questionnaires were distributed; however, only 1304 of them were valid and further used for the analysis. The survey method was particularly relevant for our study as the purpose was to investigate the relationships between variables of interests. To test the relationships hypothesized, the SEM-PLS model was computed. The model was developed based on the Social Capital Theory (Lin, 1999): education as a representation of an asset of social capital in our model.

This study only isolated education as a domain of quality of life, and we examined the role of education on three domains of well-being (i.e., economic, health, and emotion). To measure education, this study surveyed the availability of quality education providers and facilities within the residential areas of the respondents. Other aspects of education measured include the opportunity for scholarships and accessibility to financial aids. These measures of education may not be the commonly used items for quantifying an education construct; however, it is important to note that—in this study—education is a function of the quality of life. The economic domain is a part of well-being construct and is measured through items surveying participants about their economical standing, from being able to fulfill their financial needs to having savings and insurance. Survey items for the health domain include the participants' current health condition and physical state. The emotion domain asked about participants' experiences with depression, stress, anger, and enjoyment. In other words, this last domain measured the respondents' recent feelings they encounter at home, at work, and in their social life.

The data were analyzed using SmartPLS3 to evaluate the predictive value of education and tracing the path relationships between education and well-being domains. The PLS-SEM model was analyzed by examining both the structural model as well as the measurement model.

RESULTS

In this study, we evaluated the influence of education on well-being attributes, that is economic, health, and emotion. Figure 1 illustrated the model we examined with the arrows indicating the path analyses traced using the SEM-PLS method. To evaluate the results, first, we examined the measurement model by examining the indicator loadings, reliability, and validity. When the criteria for the measurement model are met, only then we assessed the structural model.

Assessing the Measurement Model

The result presented below suggests that the measurement model assessment is satisfactory. Table 2 shows the elements of the outer model to analyze the fit of the outer model. All outer loadings were larger than .708. The factor loading values above .708 are recommended as they indicate that the construct explains more than 50% variance of the indicator (Hair, et al., 2019).

Table 1: Result summary for the reflective outer model

Latent Variable	Indicators	Loadings	Composite Reliability	AVE	Cronbach's Alpha
Education	B6A	.731	.903	.655	.874
	B6B	.758			
	B6C	.777			
	B6D	.931			
	B6E	.833			
Economy	C2A	.871	.915	.731	.893

	C2B	.873			
	C2C	.884			
	C2D	.807			
Health	C3A	.703	.919	.738	.882
	C3B	.935			
	C3C	.843			
	C3D	.918			
Emotion	C4B	.907	.922	.748	.890
	C4C	.890			
	C4D	.856			
	C4E	.802			

Reliability

Traditionally, Cronbach’s alpha is used to measure internal consistency reliability, in this study, we found Cronbach’s alpha larger than .800 for all constructs. According to [Hair, et al. \(2012\)](#), Cronbach’s alpha tends to provide a conservative measurement in PLS-SEM, hence suggesting the use of composite reliability as a replacement ([Hair, et al., 2012](#)). Table 2 shows that the composite reliability value for each construct was between .70 and .90, reflecting a “satisfactory to good” range ([Hair, et al., 2019](#)). Additionally, none of the reliability value was larger than .95. [Hair, et al. \(2019\)](#), suggests that a very high-reliability value can indicate the possibility of undesirable response patterns.

Table 2: Fornell-Larcker criterion analysis for checking discriminant validity

	1	2	3	4
1. Education	.809			
2. Economy	.313	.855		
3. Health	.224	.728	.859	
4. Emotion	.205	.784	.846	.865

Validity

The convergent validity was observed by evaluating each latent variable’s Average Variance Extracted (AVE). According to [Hair, et al. \(2019\)](#), convergence validity measures how well a construct converges to explain the indicators’ variance. As presented in Table 2, we found that all of the AVE values were higher than the acceptable threshold of .50, so the convergent validity of this model is confirmed.

To establish discriminant validity, we used the [Fornell and Larcker’s \(1981\)](#) suggestion to observe the square root of AVE in each latent variable. The values need to be larger than other correlation values among the latent constructs. Table 3 shows these values on the diagonal cell (they are highlighted for easy identification), and all values fulfilled the Fornell-Larcker criterion for discriminant validity.

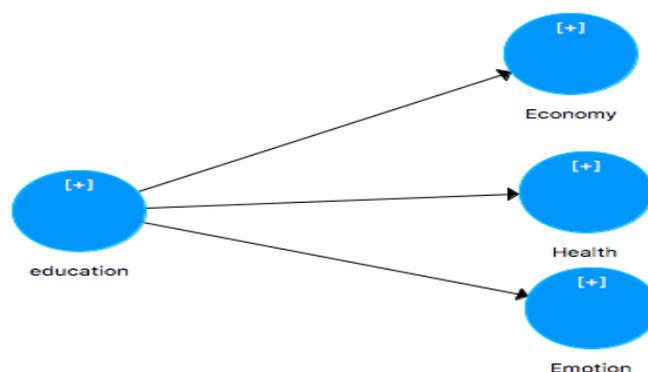


Figure 1: The structural model

Assessing the Structural Model

The above structural paths were tested using PLS-SEM, utilizing SmartPLS3. This model shows the impact of education on the Selangorians’ economy, health, and emotion.

Table 3: R-square and path coefficients

Variables	R-Square	Path Coefficients	T Statistics	P Values
Economy	.093	.224	1.498	.134
Health	.062	.207	1.264	.206
Emotion	.329	.475	3.802	.009**

The results presented in Table 1 demonstrates that emotion is significantly influenced by education ($R^2 = 32.9\%$). The other two well-being constructs were not significantly influenced by education among Selangorians (i.e., Economy [$R^2 = 9.3\%$] and Health [$R^2 = 6.2\%$]). The statistically significant R^2 value indicates that 32.9% variance in emotion can be explained by the education construct. The path coefficient of the relationship between education and emotion was also statistically significant ($\beta = .475, p < .05$), but not significant for the relationships between education and the other two latent constructs (economy, $\beta = .224, p = .134$; health, $\beta = .207, p = .206$). The significant weight of .475 is considered relevant (Hair, et al., 2019) and can be concluded education to have a substantial contribution to emotion.

DISCUSSION

Three important results are deemed important to discuss. First, we documented evidence that education significantly influences emotion among Selangorians. Emotion is a state of feeling that resulted in physical or psychological changes that can influence the thought and behavior of the individual. The James-Lange Theory of Emotion suggests that emotions occur as a result of physiological reactions to events (Coleman & Snarey, 2011). The results of this study showed that emotion is positively linked with education construct, indicating the positive role of education in shaping the respondents' emotional state. To highlight the kind of positive effect that education has on the people's emotion, we looked at the measures of education that is emphasized on the availability of quality education facilities and providers, as well as accessibility to scholarships and financial aids. This finding shows the importance of quality education toward people's feelings.

Previous research has associated education facilities and infrastructure with students' academic achievement for decades and found consistent positive relationship (Buckley, et al., 2004; Cash, 1993; McGuffey, 1982; O'Neil & Oates, 2001). The positive relationship indicates that students learn better in a school with good facilities which can be further implied that the students are happier in schools with higher-quality infrastructure compared to schools with poorly shaped buildings. Importantly, and more related to the present study, DiPaola (2005) found a strong tie between community engagement with student achievement, and that school engagement with the community depends on the condition of school buildings (Berner, 1993).

How one feels can have an impact on how they carry their tasks at work, how they interact with others, how well they take care of themselves and their family. Hence, one's emotional state is a crucial aspect of an individual's success and function in life. Therefore, this finding highlighting education as a driver of emotion recalls for the close attention to re-evaluate the aspects of quality education made available for the people.

Secondly, a surprising result showed that education did not have a significant influence on the economy in Selangor, Malaysia. The non-significant path coefficient between education and economy indicated a contradictory finding with previous research (c.f. ESRC, 2014). The Council reported that consistent findings have been seen of the important role of education in the economic development of an individual. Other researchers have traced the connection across countries (Hanushek & Woessmann, 2008; Krueger & Lindhal, 2001). The two aspects, however, do not have a connection in Selangor. This non-significant link was similarly recorded by Pritchett (2001) whose study found no relation at all between schooling and economic growth. Another rationale could be due to the nature of the education measure which capitalize on the availability of quality education rather than using the students' test scores of school enrolment ratios (more common measures of education). Importantly, all the research cited which has found a significant relationship between education and economy looked at the economic growth of the nation that they investigated, while in this study, we evaluated the participants' individual economic state.

Lastly, the non-significant relationship was also detected between education and health. This finding implies that education has no influence on health. This came to no surprise that today's society received information not just through formal education but also many other avenues, for example, social media. A vast amount of information about health is shared every minute on social media, which could be one reason for the lack of impact of education on health. In addition, the education items used in this study were all about the facilities, resources, and scholarship rather than the knowledge. Therefore, the nature of the variable could be the reason for the contradictory result.

CONCLUSION

The main finding of this study in which education shapes the emotions of a community (i.e., Selangor) implies that a psychologically healthy society is a result of the availability of quality education accessible by the members of the society. Education is important to reduce the inequality gap (Muller, 2002), and our finding revealed a new gap that education can minimize, that is emotions that the individuals experience. In other words, education can help shape a happy community. Therefore, educational policymakers need to collaborate with community leaders to enhance the interactions between schools and the communities around them. Specific programs can be created to better bridge the connections between schools and communities. Community leaders can promote school volunteerism to the community members in order to strengthen their ties. Not only parents are encouraged to take part in school activities, but another member of society can benefit emotionally by engaging with the schools. Besides, curriculum designers can put more emphasis on community engagement in school curriculum: School children can learn happily through interactions with the community, experience hands-on learning and gain knowledge through real-life observations. In this case, policymakers need to anchor learning using the place-based curriculum. On the whole, Woodhouse and Knapp (2000)

also suggested that place-based education guide students through conventional outdoor activities and experiential approaches to help students connect with the communities.

Importantly, the findings of this study modify the Social Capital Theory conceptualized by Lin (1999) stating that an investment of social capital assets and resources lead to returns in instrumental (wealth, power, and reputation) and expressive (physical health, mental health, and life satisfaction), in particular for the community of Selangor. This study concluded a significant contribution of education as an asset of social capital only in mental health attributes, in this study we referred to as emotion. Though not fully confirming the theory nor previous studies on social capital, this finding is reflective of the behavior and trends of the current generation. Today, people do not rely on formal education to strive for success. A healthier lifestyle could also be a product of the health-aware community more than the result of education. However, living with a good economy and health could be meaningless if our emotional state is not good. Therefore, this study concludes that to have a happier community, authorities need to ensure a good education system is available to serve and educate the people and their children.

LIMITATION AND STUDY FORWARD

The scope of this study covers the areas within the Selangor municipalities; and therefore, the results are particularly related to the nature of Selangor demographics. Besides, the domains included in this study are part of the well-being framework evaluating the quality of life in Selangor, Malaysia. We recommend future research to conduct a holistic investigation by including various elements of education and evaluate the effect on educational attainment. Student performance, was not included in this study, needs to be addressed to present an objective overview of the impact of the social and environmental factors.

ACKNOWLEDGEMENT

We would like to thank the Selangor State Government for funding the research under the grant no. SUK GPPSTI/2017/002.

AUTHORS' CONTRIBUTION

The first author conducted the research, computed the analyses, and prepared the manuscript, the second author conducted the research, wrote the abstract and introduction, the third author advised on the topic and questionnaire development, the fourth author conducted the research and performed the data screening and analyses, and finally, the fifth author prepared the final manuscript and made revisions and edits.

REFERENCES

1. Barro, R. (1999). Human capital and growth in cross-country regressions. *Swedish Economic Policy Review*, 6, 237-277.
2. Berner, M. M. (1993). Building conditions, parental involvement, and student achievement in the District of Columbia public school system. *Urban Education*, 28(1), 6-29. <https://doi.org/10.1177/0042085993028001002>
3. Birdsall, N. (1993). *Social development in economic development*. Policy Research Working Paper Series, The World Bank.
4. Buckley, J., Schneider, M., & Shang, Y. (2004). *The effects of school facility quality on teacher retention in urban school districts*. National Clearinghouse for Educational Facilities.
5. Cash, C. S. (1993). *Building condition and student achievement and behavior*. (Doctoral dissertation). Virginia Polytechnic Institute and State University, Blacksburg.
6. Center on Society and Health. (2015). *Why education matters to health: Exploring the causes*. <https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html>
7. Coleman A. E., & Snarey, J. (2011). James-Lange theory of emotion. In S. Goldstein & J. A. Naglieri (Eds.), *Encyclopedia of child behavior and development*. Springer.
8. Cooray, A. (2010). The role of education in economic growth. *Economics Working Papers from School of Economics*, WP 10-14. <https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1255&context=commwkpapers>
9. Cutler, D., Huang, W., & Lleras-Muney, A. (2014). When does education matter? The protective effect of education for cohorts graduating in bad times. *NBER Working Paper No. 20156*. <https://doi.org/10.3386/w20156>
10. Deraniyagala, S. (1995). *Technical change and efficiency in Sri Lanka's manufacturing industry*. Oxford.
11. DiPaola, M. F. (2005). Bridging or buffering: the impact of schools' adaptive strategies on student achievement. *Journal of Educational Administration*, 43, 60-71. <https://doi.org/10.1108/09578230510577290>
12. Durlaud, S., & Johnson, P. (1995). Multiple regimes and cross-country growth behavior. *Journal of Applied Econometrics*, 10, 365-384. <https://doi.org/10.1002/jae.3950100404>
13. Economic and Social Research Council (ESRC). (2014). *The wellbeing effect of education*. Retrieved from <https://esrc.ukri.org/news-events-and-publications/evidence-briefings/the-wellbeing-effect-of-education/>

14. Flap, H. D. (1995). Social capital in the reproduction of inequality. *Comparative Sociology of Family, Health and Education*, 20(6), 179-202.
15. Flint, N. (2011). *Inspiring leaders to improve children's life*. Research Associate Full Report. Retrieved from <https://dera.ioe.ac.uk/2981/1/download%3Fid%3D147205%26filename%3Dschoools-communities-social-capital-full-report.pdf>
16. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
17. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
18. Hair, J. F., Sarstedt, M., Hokens, L., & Kuppelwieser, V. G. (2012). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
19. Hanson, J. M., Trolian, T. L., Paulsen, M., & Pascarella, E. (2016). Evaluating the influence of peer learning on psychological well-being. *Teaching in Higher Education*, 21(2), 191-206. <https://doi.org/10.1080/13562517.2015.1136274>
20. Hanushek, E. (1995). Interpreting recent research on schooling in developing countries. *World Bank Research Observer*, 10, 227-246. <https://doi.org/10.1093/wbro/10.2.227>
21. Hanushek, E., & Kimkon, D. (2000). Schooling labour force quality, and the growth of nations. *American Economic Review*, 90, 1184-1208. <https://doi.org/10.1257/aer.90.5.1184>
22. Hanushek, E., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of Economic Literature*, 46, 607-668. <https://doi.org/10.1257/jel.46.3.607>
23. Hornby, A. S., Cowie, A. P., & Gimson, A. C. (1987). *Oxford advanced learner's dictionary of current English*. Oxford University Press.
24. Howell, A. J. (2016). Implicit theories of personal and social attributes: Fundamental mindsets for a science of wellbeing. *International Journal of Wellbeing*, 6(3), 113-130. <https://doi.org/10.5502/ijw.v6i3.529>
25. Krueger, A., & Lindahl, M. (2001). Education and growth: Why and for whom? *Journal of Economic Literature*, 39, 1101-1136. <https://doi.org/10.1257/jel.39.4.1101>
26. Lavrakas, P. J. (2008). Cluster sample. In *Encyclopedia of Survey Research Methods*. Sage. <https://doi.org/10.4135/9781412963947.n67>
27. Levine, R., & Renelt, D. (1992). A sensitive analysis of cross-country growth regressions. *American Economic Review*, 82, 942-963.
28. Lin, N. (1999). Building a network theory of social capital. *Connections*, 22(1), 28-51.
29. Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, 107, 407-437. <https://doi.org/10.2307/2118477>
30. McGuffey, C. (1982). Facilities. In Walbert, H.J. (Ed.), *Improving Educational Standards and Productivity* (pp. 237-288). McCutchan.
31. Mosey, S., & Wright, M. (2007). From human capital to social capital: A longitudinal study of technology-based academic entrepreneurs. *Entrepreneurship Theory and Practice*, 31(6), 909-935. <https://doi.org/10.1111/j.1540-6520.2007.00203.x>
32. Muller, A. (2002). Education, income inequality, and mortality: A multiple regression analysis. *BMJ*, 2002, 324-333. <https://doi.org/10.1136/bmj.324.7328.23>
33. Myers, D. G. (2004). *Theories of emotion*, 7th ed. Worth Publisher.
34. O'Neill, D. J., & Oates, A.D. (2001). The impact of school facilities on student achievement, behavior, attendance and teacher turnover rate in central Texas middle schools. *Council of Educational Facility Planners Journal*, 36(3), 14-22.
35. Ozturk, I. (2001). The role of education in economic development: A theoretical perspective. *Journal of Rural Development and Administration*, 1, 39-47.
36. Pritchett, L. (2001). Where has all education gone? *The World Bank Economic Review*, 15(3), 367-391. <https://doi.org/10.1093/wber/15.3.367>
37. Rose, L., Williams, I. R., Olsson, C. A., & Allen, N. (2018). Promoting adolescent health and well-being through outdoor youth programs: Results from a Multisite Australian Study. *Journal of Outdoor Recreation, Education, and Leadership*, 10(1), 33-51. <https://doi.org/10.18666/JOREL-2018-V10-I1-8087>
38. SaviCakar, F., & Tagay, O. (2017). The mediating role of self-esteem: The effects of social support and subjective well-being on adolescents' risky behaviors. *Educational Sciences: Theory and Practice*, 17(3), 859-876.
39. Sinclair, J. (Ed.). (1990). *Larousse Cobuild English learner's dictionary*. Larousse et Collins.
40. West-Burnham, J., Otero, G. G., & Farrar, M. (2007). *Schools and communities: Working together to transform children's lives*. Network Continuum.
41. Woodhouse, J. L., & Knapp, C. E. (2000). *Place-based curriculum and instruction: Outdoor and environmental education approaches*. ERIC Clearinghouse on Rural Education and Small Schools.