

QUALITY OF EDUCATIONAL SERVICES AND STUDENTS' RESILIENCE: A UNIVERSITY GOVERNANCE STUDY

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Abstract

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Due to the shift in the learning format, students must enhance their resilience during the pandemic. The purpose is to examine how the subjective well-being of students influences the connection between the quality of educational services and students' resilience. The research was carried out at two institutions: Universiti Malaysia Kelantan in Malaysia and Universitas Mercu Buana Yogyakarta in Indonesia. The research subjects are 517 students (212 Malaysians and 305 Indonesians) aged 20–30 years old who actively participated in learning during the pandemic. Data collection was conducted by an online survey measuring resilience, subjective well-being, and service quality. Data were analyzed using path analysis and structural equation modelling (SEM) with the SmartPLS software. The findings indicate that the quality of service has a direct and positive impact on students' resilience and students' subjective well-being. Moreover, students' subjective well-being has a direct and positive impact on their resilience. Lastly, the findings showed that subjective well-being acts as a mediator between service quality and students' resilience. The research highlights the significance of subjective well-being in enhancing the impact of higher education service quality on students' resilience.

Keywords: Student Subjective Well-Being, Resilience, Service Quality, Malaysia, Indonesia

Authors' individual contribution: Conceptualization — A.S.; Methodology — A.S., P.D.G., and R.P.R.; Software — R.P.D. and R.A.S.; Validation — A.S. and P.D.G.; Formal Analysis — P.D.G., R.P.D., and R.A.S.; Investigation — A.S.; Resources — A.S.; Data Curation — A.S.; Writing — Original Draft — A.S.; Writing — Review & Editing — A.S. and R.P.R.; Visualization — R.P.D. and R.A.S.; Supervision — P.D.G. and R.P.R.; Project Administration — R.P.D. and R.A.S.

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1. INTRODUCTION

Resilience is an important psychological capacity that helps humans overcome the difficulties they face throughout their lifespan (Feder et al., 2019). Thus, accordingly, education must go beyond the advancement of academic skills. It is the responsibility of educational institutions to prepare

individuals capable of achieving their ambitions and aspirations while being fully functional and resilient (Ngui & Lay, 2020). The pandemic has become a downturn that must be overcome by students because it has disrupted normal learning patterns. This condition challenges the resilience of students to be able to achieve their learning goals. To increase their resilience, a supportive environment is

an important factor. Nonetheless, a pleasant environment and adaptable personal qualities can reinforce each other (Zhu et al., 2021).

The quality of university services includes the reliability of real academic and non-academic staff, responsiveness, assurance, and empathy that are expected to create a supportive environment (Yusof et al., 2022). On the other hand, how students perceive these services influences the effectiveness of the support. Therefore, learning needs to include students' personal characteristics. Many studies have explored subjective well-being as a consequence (Zubair et al., 2018; Yıldırım & Tanrıverdi, 2021), while it can also be a predictor. Therefore, this study investigated the involvement of students' subjective well-being in the impact of service quality on their resilience.

Subjective well-being is defined as the entirety of an individual's emotional and cognitive evaluations of their life. This evaluation takes into account both emotional responses to events and assessments of contentment and happiness based on cognition (Diener et al., 2001). The cognitive and affective aspects of subjective well-being are highlighted in this concept. General life satisfaction, satisfaction with important domains (like work), having many happy feelings and moods (positive affect), and having few negative emotions and moods (low levels of negative affect) are all components of subjective well-being (Diener, 2000). The findings of a review conducted by Larsen and Eid (2008) indicated that happy individuals tend to experience success across various life domains, partly attributable to their happiness. Happy people exhibit greater sociability, altruism, activity levels, self-esteem, and positive regard toward themselves and others. Additionally, they tend to possess stronger bodies and immune systems, improved conflict resolution skills, and enhanced creativity compared to individuals who are not as happy (Yıldırım & Arslan, 2022).

Subjective well-being of students is the best predictor of prosocial behaviour in an academic setting, according to a study, with academic satisfaction, psychological health issues, and school accomplishment coming in second and third, respectively (Liu et al., 2021). According to studies, higher academic achievement is correlated with increased subjective well-being. It has been stated that well-being is a predictor and contributing element to positive life outcomes, such as scholastic success and fulfilling relationships, rather than only the outcome of these conditions (Kim & Choe, 2022). Resilience and quality of life are significantly positively correlated, according to a study on the well-being of postsecondary students in five different countries. However, the scope of this investigation was restricted to determining how these two factors correlated. It is still unclear if subjective well-being influences how people perceive the level of care they receive in academic settings. The reason this question needs to be answered is that if students' subjective well-being and other factors affect how good they think their higher education institution's services are, then those services may not provide the desired outcomes (Mohtar, 2020; Schoeps et al., 2020).

The purpose of this study is to examine how the subjective well-being of students influences the connection between the quality of educational

services and the resilience of students. The research was carried out at two institutions: Universiti Malaysia Kelantan in Malaysia and Universitas Mercu Buana Yogyakarta in Indonesia.

This paper is structured as follows. Section 2 is a literature review, where past research and studies related to the topic are discussed, in addition to identifying hypotheses in the literature. Section 3 is a research methodology that discusses the research design, sampling techniques, data collection instruments, and analytical methods employed in the study. Section 4 is a presentation of the results and their interpretation, and Section 5 is a discussion of the findings in light of the research questions and objectives of the study. Finally, Section 6 is a conclusion that summarizes the paper, its significance, and implications for future studies in the field.

2. LITERATURE REVIEW

According to Luthar et al. (2000), resilience is generally described as a dynamic process or a collection of constructive adaptations or growth patterns that take place in the face of considerable adversity. It refers to a person's ability to overcome difficulties, gain experience, and bounce back when faced with challenges (Smith-Osborne & Whitehill Bolton, 2013). Resilience hinges on two crucial elements, namely: 1) experiencing significant threats or hardships, and 2) being able to adapt positively despite major challenges during the developmental process. Youth who show resilience display good outcomes despite serious threats to adaptation or development. Although resilience is perceived as either absolute or relative and is subject to change over time, it is better understood as a process of development or a dynamic ability rather than as a fixed result or quality (Luthar et al., 2000).

Researchers have discovered a number of components of resilience, seven of which are readily teachable. These elements cover a variety of abilities and mindsets that are essential for overcoming obstacles in life (Chu et al., 2023). First and foremost, emotional awareness and control are key components of resilience. Resilient people have a firm grasp of their own emotions and are at ease sharing them with people they can trust. Secondly, impulse control is essential; resilient individuals demonstrate the ability to resist acting on every impulse they experience. Realistic optimism is another key component, characterized by viewing oneself and situations as optimistically as possible while remaining grounded in reality. Flexible thinking is crucial, as it involves generating multiple solutions to problems, increasing the likelihood of finding effective resolutions. Self-efficacy plays a vital role, as resilient individuals believe in their ability to navigate challenges, leveraging their strengths to overcome obstacles. Empathy also contributes to resilience by fostering strong social connections, while reaching out signifies a willingness to explore new opportunities and take risks, leading to personal growth and fulfillment. These components collectively form a foundation for resilience, empowering individuals to thrive in the face of adversity (Rapuano, 2019; Hossan et al., 2021).

Resilience is an important psychological construct because it is needed across the human lifespan,

from early childhood to senior adulthood, as adversities might arise at any time during people's lives. Studies reveal that individual resilience positively impacts and predicts individual success and entrepreneurial success (Walsh & McCollum, 2020; Emueje et al., 2020; Moreno, 2021; Fernández-Díaz et al., 2021). Researchers have discovered many individual as well as environmental qualities that can promote resilience. Emotional competence, self-regulation, problem-solving and decision-making skills, social awareness, social competence, self-efficacy, optimism, a sense of purpose, self-confidence, and belonging are among the personal traits mentioned in the literature on resilience (Gillham et al., 2013). Resilience in the academic setting is characterized by students' capacity to manage stress, study pressure, and academic disappointments (Martin & Marsh, 2006). Students' learning habits must be drastically altered during a pandemic, which could lead to stress and pressure to study. Students' resilience will aid them in handling pressure in this way.

Customers compare their expectations of what service providers should provide with their opinions of the firms' performance to determine the quality of the services they receive. Services are viewed as high-quality and ideal when perceived service quality is similar to or greater than expected service quality (Parasuraman et al., 1988). These researchers distinguished five aspects of high-quality services. Firstly, the tangible dimension consists of actual buildings, furnishings, and staff appearance. Secondly, the capacity to deliver the promised service precisely and consistently is referred to as reliability. Thirdly, responsiveness entails being ready to help clients and offer timely assistance. Fourthly, assurance has to do with staff members' expertise, politeness, and capacity to instil trust. Finally, empathy includes the considerate and customized service that the company offers to its clients. Customers' opinions of the quality and satisfaction of the services they receive are influenced by these factors taken together (Arslan & Coşkun, 2020; Donald & Jackson, 2022).

In an educational environment, service quality plays a crucial role in enhancing student satisfaction, leading to increased loyalty (Martínez-Argüelles & Batalla-Busquet, 2016; Chandra et al., 2018; Pham et al., 2019; Lee & Seong, 2020; de la Cruz Del Río-Rama et al., 2021; Ali et al., 2022). Better service quality also correlates with improved student retention, commitment, academic engagement, and performance (Azam, 2018; Bakrie et al., 2019). Qualities found in families, communities, and schools can also help adolescents develop resilience. Several environmental elements, such as supportive connections, safety, prosocial norms, high expectations, structure and guidance, and opportunities to contribute, have been highlighted by Gillham et al. (2013) as factors that promote resilience. According to this analysis, adolescents who have close relationships with their families and schools are less likely to experience melancholy or participate in risky behaviours like substance abuse or violence. This result is in line with Zubair et al. (2018), which showed that resilience is more likely when one has a network of friends and teachers who are supportive. Meanwhile, Yıldırım and Tanrıverdi (2021) reported that social support significantly predicts college students' resilience and satisfaction with life.

The current research assumes that in addition to caring relationships and social support, the overall university service quality, including tangibles, reliability, responsiveness, assurance, and empathy, is a promotive environmental factor which predicts students' resilience. This is possible because during the pandemic, the learning programs were fully conducted online, so tangible services such as the university online learning system have certain impacts on students' learning process. On the other hand, how students perceive the quality of services provided by an academic institution might vary because of personal differences, including subjective well-being. The results of the literature review that led to the proposed hypothesis are depicted in Figure 1 and can be stated as follows:

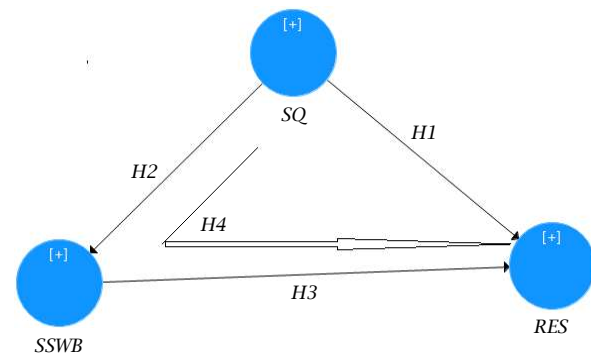
H1: Service quality positively and directly influences students' resilience.

H2: Service quality positively and directly influences students' subjective well-being.

H3: Subjective well-being positively and directly influences students' resilience.

H4: Subjective well-being mediates the effect of service quality on students' resilience.

Figure 1. Research framework



Note: SQ — Service quality, SSWB — Student subjective well-being, RES — Resilience.

3. RESEARCH METHODOLOGY

3.1. Research variables and measurements

Student resilience is commonly assessed using the Connor-Davidson resilience scale (CD-RISC), which comprises ten items. The SERVQUAL scale developed by Parasuraman et al. (1988) is used to determine service quality levels. Three more items are added, and the scale is modified to fit the needs of educational institutions. The tangible dimension includes websites, online learning tools, online academic information systems, and online libraries. The qualities of certainty, empathy, responsiveness, and reliability apply to both academic and non-academic workers. Respondents' subjective well-being is measured using the student subjective well-being questionnaire.

3.2. Method

Undergraduate and graduate students at Universitas Mercu Buana Yogyakarta, Indonesia, and Universiti Malaysia Kelantan, Malaysia, were surveyed for this study. Three assessment scales were combined to

create a questionnaire that was emailed to students from different majors. A total of 517 responses were gathered, which is more than the required minimum sample size (348) for a population of 22,000 university students. SmartPLS 3.0 was used to perform validity and reliability tests on the measurement. The outer loading factor of each construct should be at least 0.7, and the average variance extracted (AVE) should be at least 0.5, according to the conventional standards for evaluating convergent validity.

4. RESEARCH RESULTS

Table 1 displays the distribution of research subjects by gender and university origin. The result presents the distribution of research subjects by gender and country. In Malaysia, 151 males and 61 females participated, while in Indonesia, 123 males and 182 females were surveyed. The total sample size across both countries was 517 participants. Males comprised 52.99% of the total, with females making up 47.00%.

Table 1. Research subjects

Characteristics	Malaysia	Indonesia	Amount	Percentage (%)
Male	151	123	274	52.99
Female	61	182	243	47.00
Total	212	305	517	100.00

The results of these tests show that all constructs meet the standard, with loading factors ranging from 0.708 to 0.884 (see Table 2), and items with the highest outer loading factor for each variable can be seen in Table 3. Meanwhile, all measurements meet the Fornell-Larcker and cross-loading discriminant validity criteria, which can be seen in Table 4, and the AVE values range from 0.589 to 0.688. Composite reliability (CR) and Cronbach's alpha were applied to test the reliability of the instrument. The CR value is above the minimum standard of 0.7, ranging from 0.886 to 0.929. Cronbach's alpha for students' resilience (*RES*), service quality (*SQ*), and student subjective well-being (*SSWB*) values are, respectively, 0.940, 0.900, and 0.886, as shown in Table 5, while collinearity statistics show a variance inflation factor (VIF) value below 5, ranging from 1.000 to 2.873.

Table 2. Outer loadings

Items	RES	SQ	SSWB
R1	0.777		
R2	0.726		
R4	0.712		
R5	0.828		
R6	0.789		
R7	0.728		
R8	0.819		
R9	0.752		
S1		0.736	
S2		0.852	
S3		0.828	
S4		0.884	
S5		0.840	
W1			0.748
W2			0.709
W5			0.769
W6			0.743
W7			0.759
W8			0.799
W9			0.731
W11			0.785
W12			0.774
W13			0.742
W14			0.705
W15			0.730

Table 3. The highest indicator

Variable	Item code	Coeff.	Scale items
RES	R5	0.799	I can get back up after an illness or difficulty.
SQ	S4	0.884	Academic staff is swift in responding to students who need information.
SSWB	W8	0.828	I studied well in college.

Table 4. Reliability and average variance extracted

Variables	α	rho_A	CR	AVE
RES	0.900	0.903	0.920	0.589
WE	0.886	0.890	0.917	0.688
SSWB	0.929	0.930	0.939	0.563

Note: WE — Work engagement.

Table 5. Fornell-Larcker criterion

Variables	RES	WE	SSWB
RES	0.768		
WE	0.552	0.830	
SSWB	0.714	0.622	0.750

Partial least squares structural equation modelling (PLS-SEM) is used to test the hypotheses. The model is fit, according to the proposed model evaluation shown in Table 6, since the normed fit index (NFI) is 0.85, which is less than 0.9, yet the standardized root mean square (SRMR) is less than 0.10.

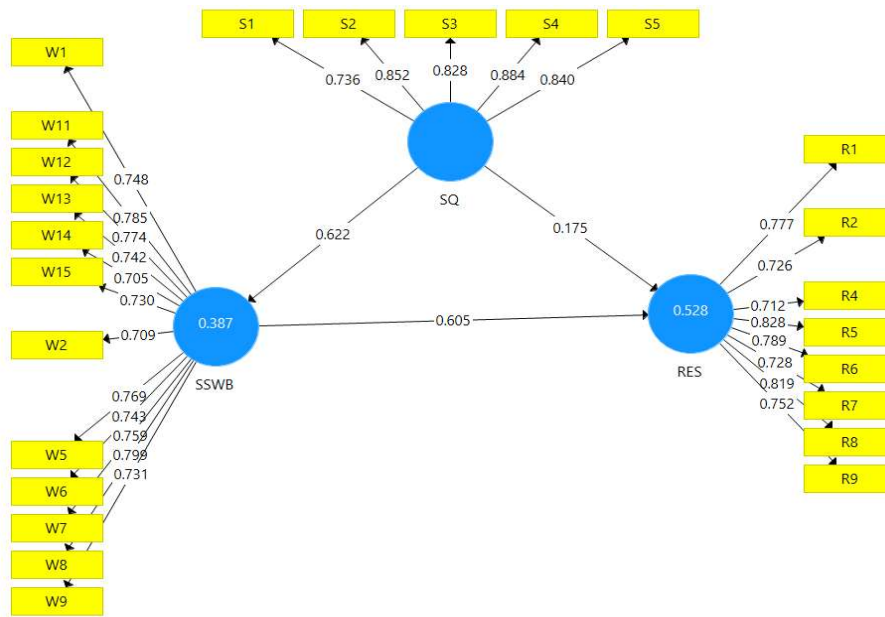
Table 6. Model fit summary

Indices	Saturated form	Expected model
SRMR	0.059	0.059
d_uls	1.150	1.150
d_g	0.410	0.410
Chi-square	1.219.603	1.219.603
NFI	0.853	0.853

Note: d_uls — the squared Euclidean distance, d_g — the geodesic distance.

The results of structural equation modelling (SEM) are presented in Figure 2. As hypothesized (*H1*), *SQ* provided by the institution has a direct positive effect on *RES*. The results also support *H2*, indicating that *SQ* positively and directly influences *SSWB*, as well as *H3*, which states that *SSWB* positively and directly influences *RES*. Meanwhile, the data analysis indicates that *SSWB* mediates the effect of *SQ* on *RES*, in line with *H4*.

Figure 2. Structural equation model



The coefficients and significance of each path analysis can be seen in Table 7. This analysis shows that *SQ* significantly influences *RES* but has only a weak impact. However, it has a moderate effect on *SSWB* as well as the influence of *SSWB* on *RES*. While *SQ* only has a weak impact on *RES*, further analysis shows that *SSWB* plays a mediating role in the relationship between *SQ* and *RES*. This mediating role supports *H4*, but *SSWB* only partially mediates the above relationship.

Table 7. Hypotheses testing

Hypothesis	Original sample	Mean	Std. dev.	t-stat.	p-value
<i>SQ</i> → <i>RES</i>	0.175	0.178	0.047	3.702	0.000
<i>SQ</i> → <i>SSWB</i>	0.622	0.623	0.028	22.211	0.000
<i>SSWB</i> → <i>RES</i>	0.605	0.603	0.040	15.178	0.000
<i>SQ</i> → <i>SSWB</i> → <i>RES</i>	0.376	0.377	0.029	13.063	0.000

Table 8 explains that shared *SQ* and *SSWB* account for 52.8% of effective *RES* factors. *SQ* explains 38.7% of the variables that affect *SSWB*.

Table 8. R-square

Variable	R-square	Adjusted R-square
<i>RES</i>	0.528	0.526
<i>SSWB</i>	0.387	0.386

5. DISCUSSION

In the first hypothesis *H1*, it can be concluded that the research data shows a direct positive effect between service quality and student resilience, with a correlation coefficient of 0.175. As with previous research, social support (in this study represented by responsiveness, reliability, assurance, and empathy of academic and non-academic staff) affects student resilience (Alva, 1991; Yildirim & Tanrıverdi, 2021). However, the real dimensions of service quality also affect their resilience, as expected, because the pandemic situation has made students rely on online learning facilities. It's just that the correlation

coefficient of 0.175 indicates that the relationship between service quality and student resilience is quite weak but still statistically significant.

The second hypothesis (*H2*), which posits that service quality significantly and favourably influences students' subjective well-being, has been supported by research by Trisela and Hermanto (2020). The estimated correlation coefficient of 0.622 suggests a robust association between the subjective well-being of students and the quality of services provided. That is, pupils' subjective well-being increases with the level of services they receive. Subjective well-being among students encompasses a range of factors, including mental health, life satisfaction, and happiness. According to Chandra et al. (2019), these findings have significant ramifications for educational institutions, as they highlight the need to prioritize service quality as a means of enhancing students' subjective well-being.

The third hypothesis (*H3*) is proven, showing a positive and direct relationship between subjective well-being and student resilience, as indicated by a large correlation coefficient of 0.605. This finding has important implications for practitioners and related parties in developing programs and services that can improve students' subjective well-being, thereby increasing their resilience. For example, counselling services, emotional support, social skills development programs, or mental health programs can help students improve their subjective well-being, assisting them in coping with stress, challenges, and obstacles in their lives (Keyes et al., 2010; Lai et al., 2022). The results confirm Yildirim and Tanrıverdi (2021), who reported that social support has an impact on the subjective well-being of students. The current research provides a new understanding that subjective well-being predicts resilience and mediates the effect of service quality on student resilience. These findings imply that academic institutions need to improve the quality of their services, both tangible and intangible, to foster student resilience and subjective well-being.

The fourth hypothesis (*H4*) states that subjective well-being mediates the effect of service quality on student resilience. This hypothesis can be confirmed because the direct relationship between service quality and resilience ($r = 0.175$) is smaller than the indirect relationship between service quality and resilience mediated by subjective well-being ($r = 0.605$). In other words, good service quality directly and positively affects the subjective well-being of students, which in turn affects their resilience. This finding is consistent with previous research showing that subjective well-being mediates the relationship between other factors, such as social support, work environment, organizational policies, and resilience. This indicates that subjective well-being plays an important role in maintaining mental health and helping a person deal with stress and challenges in life (Diener et al., 1999; Folkman & Moskowitz, 2000).

6. CONCLUSION

The research results show a significant relationship between service quality and student resilience. The correlation analysis results indicate that the higher the quality of service, the higher the resilience of students. This demonstrates that although the effect of service quality on student resilience may not be the strongest factor, its influence can still be measured significantly. However, it should be noted

that correlation does not always imply a causal relationship. In this context, while service quality positively influences student resilience, there are other factors that can also affect student resilience, such as social support, independence, and other personal factors.

Therefore, further research can be conducted to examine the effect of other factors on student resilience, as well as to investigate whether there is an interaction between these factors. While the results as a whole indicate that service quality plays an important role in increasing student resilience, it becomes important to explore whether there is a mediating factor of subjective well-being in these relationships. In this context, the quality of services provided includes various aspects, such as the quality of lecturers, facilities, learning programs, and other supporting services. Thus, the results suggest that the best service quality will have a positive impact on the subjective well-being of students.

This study has several limitations. Firstly, the number of subjects is not equal between Indonesia and Malaysia. It is hoped that future research will obtain an equal number of respondents between the two research sites to ensure consistent interpretation. Secondly, the scale uses two different languages, with dissemination to students in Indonesia using Indonesian and dissemination to students in Malaysia using English. This may result in different translations for the two sets of respondents.

REFERENCES

- Ali, M., Puah, C.-H., Fatima, S., Hashmi, A., & Ashfaq, M. (2022). Student e-learning service quality, satisfaction, commitment and behaviour towards finance courses in COVID-19 pandemic. *International Journal of Educational Management*, 36(6), 892–907. <https://doi.org/10.1108/IJEM-04-2021-0133>
- Alva, S. A. (1991). Academic invulnerability among Mexican-American students: The importance of protective resources and appraisals. *Hispanic Journal of Behavioral Sciences*, 13(1), 18–34. <https://doi.org/10.1177/07399863910131002>
- Arslan, G., & Coşkun, M. (2020). Student subjective wellbeing, school functioning, and psychological adjustment in high school adolescents: A latent variable analysis. *Journal of Positive School Psychology*, 4(2), 153–164. <https://journalppw.com/index.php/jpsp/article/view/117>
- Azam, A. (2018). Service quality dimensions and students' satisfaction: A study of Saudi Arabian private higher education institutions. *European Online Journal of Natural and Social Sciences*, 7(2), 275–284. <https://european-science.com/eojnss/article/view/5331>
- Bakrie, M., Sujanto, B., & Rugaiyah, R. (2019). The influence of service quality, institutional reputation, students' satisfaction on students' loyalty in higher education institution. *International Journal for Educational and Vocational Studies*, 1(5), 379–391. <https://doi.org/10.29103/ijevs.v1i5.1615>
- Chandra, T., Hafni, L., Chandra, S., Purwati, A. A., & Chandra, J. (2019). The influence of service quality, university image on student satisfaction and student loyalty. *Benchmarking: An International Journal*, 26(5), 1533–1549. <https://doi.org/10.1108/BIJ-07-2018-0212>
- Chandra, T., Ng, M., Chandra, S., & Priyono. (2018). The effect of service quality on student satisfaction and student loyalty: An empirical study. *Journal of Social Studies Education* 9(3), 109–131. <https://jsser.org/index.php/jsser/article/view/282>
- Chu, M., Fang, Z., Lee, C.-Y., Hu, Y.-H., Li, X., Chen, S.-H., Chen, T., Chen, X., & Chiang, Y.-C. (2023). Collaboration between school and home to improve subjective well-being: A new Chinese children's subjective well-being scale. *Child Indicators Research*, 16, 1527–1552. <https://doi.org/10.1007/s12187-023-10018-0>
- de la Cruz Del Río-Rama, M., Álvarez-García, J., Mun, N. K., & Durán-Sánchez, A. (2021). Influence of the quality perceived of service of a higher education center on the loyalty of students. *Frontiers in Psychology*, 12, Article 671407. <https://doi.org/10.3389/fpsyg.2021.671407>
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43. <https://doi.org/10.1037/0003-066X.55.1.34>
- Diener, E., Lucas, R. E., & Oishi, S. (2001). Subjective well-being: The sciences of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 63–73). Oxford University Press. <https://doi.org/10.1093/oso/9780195135336.003.0005>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Donald, W. E., & Jackson, D. (2022). Subjective well-being among university students and recent graduates: Evidence from the United Kingdom. *International Journal of Environmental Research and Public Health*, 19(11), Article 6911. <https://doi.org/10.3390/ijerph19116911>

- Emueje, I., Olanye, H. O., & Olanye, A. P. (2020). Entrepreneurial resilience and performance of an organization: A survey of small and medium enterprises in Asaba, Delta State, Nigeria. *Webology*, 17(2), 445-461. <https://doi.org/10.14704/WEB/V17I2/WEB17044>
- Feder, A., Fred-Torres, S., Southwick, S. M., & Charney, D. S. (2019). The biology of human resilience: Opportunities for enhancing resilience across the life span. *Biological Psychiatry*, 86(6), 443-453. <https://doi.org/10.1016/j.biopsych.2019.07.012>
- Fernández-Díaz, J. R., Gutiérrez-Ortega, M., Llamas-Salguero, F., & Cantón-Mayo, I. (2021). Creativity and resilience as predictors of career success. *Sustainability*, 13(8), Article 4489. <https://doi.org/10.3390/su13084489>
- Folkman, S., & Moskowitz, J. T. (2000). Stress, positive emotion, and coping. *Current Directions in Psychological Science*, 9(4), 115-118. <https://doi.org/10.1111/1467-8721.00073>
- Gillham, J. E., Abenavoli, R. M., Brunwasser, S. M., Linkins, M., Reivich, K. J., & Seligman, M. E. P. (2013). Resilience education. In I. Boniwell, S. A. David, & A. C. Ayers (Eds.), *Oxford handbook of happiness* (pp. 609-630). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199557257.013.0046>
- Hossan, M. R., Khan, M. H. A., & Hasan, M. T. (2021). Co-curricular activities and subjective well-being among university students. *SN Social Sciences*, 1(8), Article 207. <https://doi.org/10.1007/s43545-021-00214-6>
- Keyes, C. L. M., Dhingra, S. S., & Simoes, E. J. (2010). Change in level of positive mental health as a predictor of future risk of mental illness. *American Journal of Public Health*, 100(12), 2366-2371. <https://doi.org/10.2105/AJPH.2010.192245>
- Kim, E. K., & Choe, D. (2022). Universal social, emotional, and behavioral strength and risk screening: Relative predictive validity for students' subjective well-being in schools. *School Psychology Review*, 51(1), 40-54. <https://doi.org/10.1080/2372966X.2020.1855062>
- Lai, A. Y. K., Cheung, G. O. C., Choi, A. C. M., Wang, M.-P., Chan, P. S. L., Lam, A. H. Y., Lo, E. W. S., Lin, C.-C., & Lam, T.-H. (2022). Mental health, support system, and perceived usefulness of support in university students in Hong Kong amidst COVID-19 pandemic: A mixed-method survey. *International Journal of Environmental Research and Public Health*, 19(19), Article 12931. <https://doi.org/10.3390/ijerph191912931>
- Larsen, R. J., & Eid, M. (2008). Ed Diener and the science of subjective well-being. In M. Eid & R. J. Larsen (Eds.), *The science of subjective well-being* (pp. 1-13). Guilford Publications. <https://www.guilford.com/excerpts/eid.pdf?t=1>
- Lee, H. J., & Seong, M. H. (2020). A study on the effects of business service quality on satisfaction, commitment, performance, and loyalty at a private university. *The Journal of Asian Finance, Economics and Business*, 7(9), 439-453. <https://doi.org/10.13106/jafeb.2020.vol7.no9.439>
- Liu, W., Su, T., Tian, L., & Huebner, E. S. (2021). Prosocial behavior and subjective well-being in school among elementary school students: The mediating roles of the satisfaction of relatedness needs at school and self-esteem. *Applied Research in Quality of Life*, 16, 1439-1459. <https://doi.org/10.1007/s11482-020-09826-1>
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562. <https://doi.org/10.1111/1467-8624.00164>
- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43(3), 267-281. <https://doi.org/10.1002/pits.20149>
- Martínez-Argüelles, M.-J., & Batalla-Busquet, J.-M. (2016). Perceived service quality and student loyalty in an online university. *The International Review of Research in Open and Distance Learning*, 17(4), 264-279. <https://doi.org/10.19173/irrodl.v17i4.2518>
- Mohtar, N. (2020). The effects of positive psychology interventions on school conduct, peer acceptance and subjective well-being. In C. Koh (Ed.), *Diversifying learner experience: A kaleidoscope of instructional approaches and strategies* (pp. 43-74). Springer. https://doi.org/10.1007/978-981-15-9861-6_4
- Moreno, D. E. L. (2021). The impact of entrepreneurial characteristics on the business resiliency of micro, small and medium enterprises in the Philippines. *International Journal of Management Studies and Social Science Research*, 3(3), 243-253. <https://www.ijmsssr.org/paper/IJMSSSR00425.pdf>
- Ngui, G. K., & Lay, Y. F. (2020). The effect of emotional intelligence, self-efficacy, subjective well-being and resilience on student teachers' perceived practicum stress: A Malaysian case study. *European Journal of Educational Research*, 9(1), 277-291. <https://doi.org/10.12973/eu-jer.9.1.277>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40. <https://www.researchgate.net/publication/200827786>
- Pham, L., Limbu, Y. B., Bui, T. K., Nguyen, H. T., & Pham, H. T. (2019). Does e-learning service quality influence e-learning student satisfaction and loyalty? Evidence from Vietnam. *International Journal of Educational Technology in Higher Education*, 16, Article 7. <https://doi.org/10.1186/s41239-019-0136-3>
- Rapuano, V. (2019). Psychological well-being and its relationship with the academic achievement of Lithuanian students. *Socialiniai Tyrimai*, 42(2), 44-51. <https://doi.org/10.21277/st.v42i2.271>
- Schoeps, K., de la Barrera, U., & Montoya-Castilla, I. (2020). Impact of emotional development intervention program on subjective well-being of university students. *Higher Education*, 79, 711-729. <https://doi.org/10.1007/s10734-019-00433-0>
- Smith-Osborne, A., & Whitehill Bolton, K. (2013). Assessing resilience: A review of measures across the life course. *Journal of Evidence-Based Social Work*, 10(2), 111-126. <https://doi.org/10.1080/15433714.2011.597305>
- Trisela, L., & Hermanto. (2022). The effect of service quality and student satisfaction on student loyalty. *Jurnal Manajemen*, 26(2), 179-199. <https://doi.org/10.24912/jm.v26i2.900>
- Walsh, C. B., & McCollum, W. (2020). Exploring the impact of individual resilience on entrepreneurial success. *Journal of Entrepreneurship & Organization Management*, 9(5). <https://www.hilarispublisher.com/open-access/exploring-the-impact-of-individual-resilience-on-entrepreneurial-success.pdf>
- Yıldırım, M., & Arslan, G. (2022). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current Psychology*, 41(8), 5712-5722. <https://doi.org/10.1007/s12144-020-01177-2>

- Yıldırım, M., & Tanrıverdi, F. Ç. (2021). Social support, resilience and subjective well-being in college students. *Journal of Positive School Psychology*, 5(2), 127-135. <https://journalppw.com/index.php/jpsp/article/view/130>
- Yusof, N. M., Asimira, S., & Kadir, S. A. (2022). Student satisfaction of university service quality in Malaysia: A review. *International Journal of Academic Research in Progressive Education and Development*, 11(1), 677-688. <http://doi.org/10.6007/IJARPED/v11-i1/10985>
- Zhu, X., Shek, D. T. L., & Chan, C. H. M. (2021). Promoting service leadership qualities and well-being among university students through an online course during COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(15), Article 8162. <https://doi.org/10.3390/ijerph18158162>
- Zubair, A., Kamal, A., & Artemeva, V. (2018). Mindfulness and resilience as predictors of subjective well-being among university students: A cross cultural perspective. *Journal of Behavioural Sciences*, 28(2). https://pu.edu.pk/images/journal/doap/PDF-FILES/01_v28_2_18.pdf