



Differences in Academic Self-Efficacy Levels in Terms of the Priority Choices of Graduate Profiles on College Students

Hastaning Sakti¹

Dian Veronika Sakti Kaloeti^{1*}

Nur Diana Indrawati²

¹*Faculty of Psychology, Diponegoro University, Indonesia*

²*Master of Psychology, Faculty of Psychology, Gadjah Mada University, Indonesia*

*Corresponding author: Dr. phil. Dian Veronika Sakti Kaloeti, S.Psi., M.Psi

Faculty of Psychology, Diponegoro University, Indonesia.

Email: dvs.kaloeti@live.undip.ac.id

Highlights

- This study shows that students face mental health problems caused by academic and non-academic stress.
- This study shows that students with good academic self-efficacy are reported to be able to overcome the various effects of stress they experience.
- This study found that gender, differences in faculty clusters, and scholarship ownership were found to affect academic self-efficacy in students.
- This study found that universities have a strategic role in providing direction for their students by establishing and designing appropriate graduate profile programs.

Abstract

Background: Students with good academic self-efficacy are reported to be able to handle academic stress and non-academic stress. To have academic self-efficacy needs to be supported by a clear higher education orientation. Furthermore, Universitas Diponegoro (UNDIP) has a graduate profile orientation called COMPLETE (Communicator, Professional, Leader, Thinker, Entrepreneur, Educator). **Study aims:** (1) to see differences in graduate profile choice priorities affect academic self-efficacy among UNDIP students and (2) explore other demographic factors that can affect academic self-efficacy. **Method:** This study uses a survey method with 2,889 first-year college students' participants. The instrument used in this study was The Beliefs in Educational Success Test (BEST) and a priority survey that students wanted after graduate based on COMPLETE. Data analysis used in this study is the Independent Sample T-Test. **Result:** The results of this study found that students with a graduate profile orientation as a Leader ($p = 0.000$) had significantly higher academic self-efficacy compared to other graduate profile orientations. Furthermore, this study also found that gender ($p = 0.019$), differences in faculty clusters ($p = 0.012$), and scholarship ownership ($p = 0.053$) influenced academic self-efficacy in students. **Conclusion:** Differences in graduate profile orientation are proven to affect academic self-efficacy in students. These findings provide recommendations for campus policy holders, psychology practitioners, and further research to present appropriate programs and strategies in instilling graduate profile values in students.

Keywords: Priority Choices of Graduate Profiles; Academic Self-Efficacy; College Students

INTRODUCTION

Students are reported to be one of the vulnerable groups related to the various stressors faced by academic and non-academic stressors (Omar et al., 2020). Azila-Gbettor et al. (2015) in his research stated that academic factors that cause stress in students include pressure to get good grades, exam pressure, inadequate educational materials, and academic achievement, while non-academic causes include fear of failure and personal problems, relationships with friends, and adjustment to the campus world. Demands for educational values and limited learning time are also reported to be academic stressors for students (Zamroni et al., 2019). Furthermore, Yikealo et al. (2018) research reported that the most extensive stress contributions to students are academic and environmental. Stress in college is also associated with financial difficulties, balancing work and studies, maintaining interpersonal relationships, academic responsibilities and pressures, conflicts within the family, and difficulty managing time to carry out obligations (Phinnes and Hass, in Shorty, 2018).

Stress that is not handled correctly will cause various other problems, including decreased student academic achievement, affecting social interaction with peers and attitudes toward authority (Zhao et al., 2015), substance abuse, and academic violations (Oduaran & Akanni, 2019), the emergence of health problems such as lack of energy, loss of appetite, headaches, insomnia, and digestive issues (Ramachandiran & Dhanapal, 2018). High-stress levels can also cause students to experience symptoms of anxiety and depression, fatigue, and dropping out of campus (Kee, 2022; Abreu Alves et al., 2022).

Various studies state that it is essential for students to have good academic self-efficacy to overcome the multiple effects of stress experienced (Hayat, 2020). Academic self-efficacy refers to students' beliefs and attitudes toward their ability to achieve academic success, fulfill academic assignments, and succeed in learning material (Hayat et al., 2020). In addition, students with good academic self-efficacy tend to experience increased commitment, hard work, and perseverance in carrying out their responsibilities (Pintrich in Hayat, 2020). Furthermore, students with good academic self-efficacy are more resilient (Alyami et al., 2017) and can significantly improve their achievement (Doménech-Betoret et al., 2017).

Academic self-efficacy needs to be supported by a precise higher education orientation (Spronken-Smith et al., 2013). Spronken-Smith et al. (2013) found four directions for pursuing higher education: obtaining qualifications for specific jobs, preparing for a job, developing life skills, and learning to think and education to grow as individuals. Students' goals and future aspirations help in determination of how well it is easy to get job (Fugate et al. in Katyal, 2013). College needs to create awareness among student's orientation so it can help them become aware of goal realization and achievement (Venkatesan, 2022). Orientation of graduate profiles is also helpful for carrying out student-centered curriculum updates (Spronken-Smith et al., 2013). Tachine et al. (2017) added that instilling a graduate profile orientation creates a sense of belonging to higher education institutions.

Higher education, as an institution that oversees student learning lives, has a strategic role in instilling orientation towards higher education (Spronken-Smith et al., 2013). Universitas Diponegoro, a legal entity higher education institution (PTN-BH) and one of the largest universities in Indonesia, has a graduate profile orientation called COMPLETE (Communicator, Professional, Leader, Thinker, Entrepreneur, Educator). COMPLETE stands for Communicator (able to communicate verbally and in writing), Professional (works according to principles, development based on achievement, upholds code of ethics), Leader (adaptive, responsive to the environment, proactive, motivator, teamwork), Thinker (critical thinking, lifelong learning,

researcher), Entrepreneur (high work ethic, entrepreneurial skills, innovative, independent), and Educator (capable of being an agent of change). COMPLETE's graduate profile orientation does not only aim to produce students who are independent, qualified, and tough in science but as a form of identity that alums must have. Furthermore, the profile orientation of COMPLETE graduates focuses on producing those who have national and international competitive advantages and can contribute to the development of science, technology, arts, culture, and sports. However, no research has been found that explicitly addresses graduate profiles' influence on students' academic self-efficacy. This study aims to (1) see to what extent differences in priority selection of graduate profiles affect academic self-efficacy in Diponegoro University students and (2) explore other demographic factors that can influence academic self-efficacy.

METHOD

Study design

This study used a quantitative research design. The study was conducted in conjunction with implementing the Pendidikan Karakter (PENDIKAR) at Diponegoro University in 2021. This study used a quantitative research design and was approved by the Human Research Ethics Committee from the Faculty of Public Health, Diponegoro University with number 98/EA/KEPK-FKM/2021.

Participants

The sampling technique in this study used simple random sampling, and this is due to the random sampling of members of the population (Cresswell, 2012). The inclusion criteria for participants in this study were (1) having status as an active student at Diponegoro University, (2) having an SSO (Single Sign On) account, and (3) willing to be involved in research activities by filling out informed consent. Data collection was carried out between 13-22 August 2021.

Instruments

Two instruments are used in this study, the BEST (Beliefs in the Educational Success Test) and the desired graduate profile priority based on the COMPLETE graduate profile (Communicator, Professional, Leader, Thinker, Entrepreneur, Educator).

a. Beliefs in the educational success test

This scale was developed by Majer (2006), which aims to measure confidence in academic success (academic self-efficacy) and consists of 10 items using a Likert scale of 1 (not at all self-confident) - 4 (very confident). The maximum score of this measuring tool is 40. The higher the score obtained indicates, the higher academic self-efficacy one has. Based on the analysis, the final version of the Beliefs in the educational success test contains ten valid favorable items with a reliability coefficient of 0.973. The scale used in this study went through a series of scale adaptation processes with the five stages technique from Beaton et al. (2000), which are as follows: (1) Forward translation, carrying out the translation process from the original item into Indonesian; (2) Synthesis and evaluation of forward translation results, in which an expert carries out the synthesis and evaluation process; (3) Backward translation, namely the translation process from the results of forward translation into English; (4) Review of backward translation results, carried out by experts such as translators and linguists; and (5) Pre-testing the scale, namely the process of testing the scale.

b. Priority of desired graduate profile based on COMPLETE

Participants were asked to determine one main Priority they wanted upon graduation based on the UNDIP graduate profile: COMPLETE (Communicator, Professional, Leader, Thinker, Entrepreneur, Educator).

Procedure

This study used an online method to ask first-year undergraduate and postgraduate students to fill in the scales. Data collection was carried out between 13-22 August 2021. Participants were asked to fill the informed consent and information form before fill the BEST scale with ten items and prioritize the desired graduate profile based on the UNDIP graduate profile in questionnaire form, namely COMPLETE (Communicator, Professional, Leader, Thinker, Entrepreneur, Educator).

Data Analysis

Data analysis used in this study used the Independent Sample T Test and One Way Anova different tests. The entire data analysis was done using IBM SPSS software.

RESULT

Participant's characteristics

The total number of participants in this study was 2,889 students. See Table 1 for detail participant's characteristic.

Table 1.

Participant's Characteristics

Variable	Participant's characteristics	Total (n)	(%)
Strata	S1	2856	98,86
	S2	25	0,87
	S3	8	0,28
Faculty Cluster	Social Humanities	790	27,35
	Science and Technology	2099	72,65
Gender	Male	1611	55,76
	Female	1278	44,24
Age	17-25	2878	99,62
	>26	11	0,38
Scholarship	No	2794	96,71
	Yes	95	3,29
Priority	Communicator	925	32,02
	Professional	634	21,95
	Thinker	574	19,87
	Leader	496	17,17
	Entrepreneur	209	7,23
	Educator	51	1,77

Based on the data in Table 1, the majority of participants came from strata 1 (98.86%), the science and technology faculty cluster (72.65%), were at the stage of late adolescent development aged 17-25 years (99.62), did not receive scholarships (96.71), and choose Communicator as priority 1 of the desired graduates (32.02%).

Hypothesis Test Results

Students with a graduate profile as a Leader have significantly higher academic self-efficacy than other graduate profile orientation. Furthermore, this study also found that gender ($p = 0.019$), differences in faculty families ($p = 0.012$), and scholarship ownership ($p = 0.053$) influenced student academic self-efficacy. Let see the details in Table 2.

Table 2.
Hypothesis Test Result

Variable	Participant's characteristics	BEST	
		M (SD)	p
Strata ^{b)}	S1	33.43 (3.73)	0.139
	S2	32.08 (2.94)	
	S3	34.5 (3.66)	
Faculty Cluster ^{a)}	Social Humanities	33.71 (3.8)	0.012**
	Science and Technology	33.32 (3.69)	
Gender ^{a)}	Male	33.28 (3.76)	0.019**
	Female	33.6 (3.67)	
Scholarship ^{a)}	No	33.4 (3.72)	0.053*
	Yes	34.15 (3.8)	
Priority ^{b)}	Communicator	33.38 (3.72)	0.00***
	Professional	33.18 (3.69)	
	Thinker	33.01 (3.66)	
	Leader	34.46 (3.8)	
	Entrepreneur	33.02 (3.57)	
	Educator	33.29 (3.1)	

Notes: a) Independent sample t-test b) One-way ANOVA *** $p < 0.001$ ** $p < 0.05$ * $p < 0.1$

In more detail, Table 2 shows that men have higher confidence in academic success than women ($p = 0.019$), and students from the science and technology faculties have higher academic confidence than students from the social and humanities faculties ($p = 0.012$). Students who received scholarships had higher confidence in academic success than those who did not ($p = 0.05$).

DISCUSSION

This study aims to see to what extent differences in priority choice of graduate profiles affect academic self-efficacy in Universitas Diponegoro students and to explore other demographic factors that can influence academic self-efficacy. As far as the researcher's search, no studies have been found that focus on looking at graduate profiles' effect on students' academic self-efficacy. This is what makes this article superior in terms of novelty. Hartini et al. (2021) reported that students must master knowledge and skills properly to create readiness to interact with other individuals, including in the post-campus world, both in the work environment and the community. Therefore, tertiary institutions must carefully plan for these three things and carry out the educational agenda as best as possible. Higher education institutions that set graduate profile orientations can assist students in mastering knowledge and skills. By exposing graduate profiles, the formation of targets and outputs for students after graduation will be more precise and focused. It will make it easier to complete specific targets regarding mastery of knowledge and skills needed to encourage students to have higher academic self-efficacy.

This study found that students with a graduate orientation to become leaders have higher academic self-efficacy. Individuals with an orientation as a leader are associated with the ability to make decisions (Murphy & Johnson, 2016). It is also possible for these individuals to be better

at leading themselves and designing specific strategies to achieve a particular task (Murphy & Johnson, 2016). Confidence in setting goals and performing certain tasks encourages a more specific conceptualization of individuals with an orientation as a leader to organize behavior relevant to what is to be achieved (Murphy & Johnson, 2016). This includes academic self-efficacy, persistence, effort, goal setting, strategy use, and choice (as characteristics accompanying individuals who have a leader orientation), mediating the influence between self-efficacy and performance (Bandura, 2012).

Interestingly, the top priority graduate profile that most students are interested in in this study is to become a communicator. This can be caused because most research participants are Generation Z, more interested in digital communication (2021). Various social media and influencer phenomena can consistently influence the choice of career decisions of the younger generation (Duffet, 2023). A study conducted by Seemiller & Grace (2016) provides that the results of Generation Z students see the need for communication skills and skills related to information technology as promising things to hone and pursue. In addition, it cannot be denied that the industrial and business world likes graduates with soft communication skills (Getachew et al., 2020).

Furthermore, Sharma et al. (2022) revealed that proficient English is one of the most crucial communication skills and needs to be mastered by prospective graduates because it is highly expected and required for businesses and organizations. Deryane (2023) added that communication is essential as one of the soft skills every student is expected to have. Having good communication skills indicates that individuals can understand (comprehend), convey (deliver), and receive (receive) information properly from and to other people so that relationships can be well established (Deryane, 2023).

This study also found several demographic factors that could influence student academic self-efficacy, including gender, faculty cluster, and scholarship ownership. Male students were found to have higher academic self-efficacy than female students. These results align with the findings of Mullikin et al. (2007), who reported that men tend to have higher self-efficacy scores than women. Previous findings examine the possible factors that may influence it. Falconer and Djokic (2019) argue that the course can affect differences in academic self-efficacy scores for male and female students. Male students' academic self-efficacy scores in science, technology, and mathematics are related to logic, while female students have higher academic self-efficacy scores in the arts and languages. Male students are reported to be able to catch lessons faster than female students (Jamil, 2018). In addition, high self-efficacy is also related to students' coping efforts. Most female students worry more about difficulties and coping abilities than male students (Fallan & Opstad, 2016).

There are four sources of self-efficacy: mastery experience, vicarious experience, verbal/social persuasion, and physiological and affective states (Bandura in Hendricks, 2016). In female students, it was found that vicarious experience and social effectiveness influenced self-efficacy more than other sources, meaning that encouragement from other people was essential to encouraging self-efficacy in female students. In contrast, mastery experience was the primary source of self-efficacy in male students. The results of male students' interpretation of the success being carried out will increase their self-efficacy (Usher & Pajares, 2008). However, this study and previous research have not been able to examine the dominant factors that can explain the causes of gender differences in student self-efficacy conditions. This can be a recommendation for further research to explore factors influencing the relationship between gender and academic self-efficacy in college students.

Furthermore, this study found that students from the socio-humanities cluster showed higher academic self-efficacy than the scientific cluster. It can be caused by the higher level of difficulty and learning pressure that tends to be felt by students of the exact faculty so that many students are unsure of their ability to solve learning problems (Basith et al., 2020). Bestari et al. (2020) added that the science and technology student group has several subjects that need a laboratory or field practice practicum. The social science student group mainly conducts learning using descriptive methods such as discussions. Although Social Sciences students eventually feel bored with online learning (Salsabila, 2020), this may also indicate that there is a possibility that learning pressure tends to be low. The academic load is not too high as perceived by Social Sciences students, thus encouraging higher self-efficacy than students. On the other hand, science and technology with perceived academic loads tend to be heavier and more numerous. This condition is a recommendation for tertiary institutions and further research to evaluate and create appropriate learning systems for social and scientific students to increase academic self-efficacy in students.

This study also found that students with scholarships have a higher level of academic self-efficacy than students who do not have scholarships. This study's results align with the findings of Hermita and Thamrin (2015), who reported that scholarship recipients at the university level have high academic self-efficacy. Furthermore, scholarship recipients are assumed to have previous educational achievements, so they are considered to have the potential to have reliable academic performance (Hermita & Thamrin, 2015). Therefore, the demands and expectations from scholarship providers can ultimately encourage high academic self-efficacy in students receiving scholarships (Hermita & Thamrin, 2015). In addition, students with scholarships also tend to feel financially secure in meeting their academic needs, encouraging confidence in their education completion and success (Goetz et al., 2008).

CONCLUSION

Differences in graduate orientation are proven to affect academic self-efficacy in students. Furthermore, participant demographic factors such as gender, faculty origin, and scholarship status have also been shown to influence student academic self-efficacy. For example, male students were found to have a higher level of academic self-efficacy than female students, students from the socio-humanities group showed a higher level of academic self-efficacy compared to the scientific group, and students who had scholarships had a higher level of academic self-efficacy than students who do not have scholarships. These findings provide recommendations for campus policyholders, psychology practitioners, and subsequent research to present appropriate programs and strategies in instilling student graduate profile values by considering gender factors, faculty cluster, and scholarship ownership status to increase students' academic self-efficacy.

ACKNOWLEDGEMENT

Universitas Diponegoro supported this study under the Riset Pengembangan dan Penerapan (RPP) schema with grant number 329-41/UN7.P4.3/PP/2019. We want to thank Academic and Student Affairs Universitas Diponegoro and all the students who participated in this study.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare. Therefore, we certify that the submission is original work and is not under review at any other publication.

REFERENCE

- Abreu Alves, S., Sinval, J., Lucas Neto, L., Marôco, J., Gonçalves Ferreira, A., & Oliveira, P. (2022). Burnout and dropout intention in medical students: the protective role of academic engagement. *BMC Medical Education*, 22(1), 1–11. <https://doi.org/10.1186/s12909-021-03094-9>
- Alyami, M., Melyani, Z., Johani, A. Al, Ullah, E., Alyami, H., Sundram, F., Hill, A., & Henning, M. (2017). The impact of self-esteem, academic self-efficacy and perceived stress on academic performance: A cross-sectional study of Saudi psychology students. *The European Journal of Educational Sciences*, 04(04), 51–63. <https://doi.org/10.19044/ejes.v4no3a5>
- Azila-Gbette, E. ., Atatsi, E. ., Danku, L. ., & Soglo, N. . (2015). Stress and academic achievement: empirical evidence of business students in a Ghanaian polytechnic. *International Journal of Research in Business Studies and Management*, 2(4), 78–98.
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(9), 9–44.
- Basith, A., Syahputra, A., & Aris Ichwanto, M. (2020). Academic self-efficacy as predictor of academic achievement. *JPI (Jurnal Pendidikan Indonesia)*, 9(1), 163. <https://doi.org/10.23887/jpi-undiksha.v9i1.24403>
- Bestari Mp, D., Oktari, S., Purna, R. (2022). Perilaku social loafing mahasiswa dalam mengerjakan tugas kelompok melalui sistem daring. *Jurnal Psikologi Tabularasa*, 17(1), 1-10. doi: <https://doi.org/10.26905/jpt.v17i1.8059>
- Bierer, S. B., Prayson, R. A., & Dannefer, E. F. (2014). Association of research self-efficacy with medical student career interests, specialization, and scholarship: a case study. *Advances in Health Sciences Education*, 20(2), 339–354. doi:10.1007/s10459-014-9531-7
- Creswell, J. W. (2012). Educational research : Planning, conducting, and evaluating quantitative and qualitative research. Pearson Education.
- Doménech-Betoret, F., Abellán-Roselló, L., & Gómez-Artiga, A. (2017). Self-efficacy, satisfaction, and academic achievement: The mediator role of students' expectancy-value beliefs. *Frontiers in Psychology*, 8(JUL), 1–12. <https://doi.org/10.3389/fpsyg.2017.01193>
- Deryane, I. (2023). Pentingnya soft skills terhadap pengembangan karir mahasiswa ke depan. *Jurnal Rekaman*, 7(1).
- Duffet, R. (2020). The youtube marketing communication effect on cognitive, affective and behavioural attitudes among generation Z consumers. *Sustainability*, 12(12), 5075. <https://doi.org/10.3390/su12125075>
- Falconer, A., & Djokic, B. (2019). Factors affecting academic self-efficacy and academic self-handicapping behaviors in doctoral students. *International Journal of Doctoral Studies*, 14, 637–649.
- Fallan, L., & Opstad, L. (2016). Student self-efficacy and gender-personality interactions. *International Journal of Higher Education*, 5(3), 32–44. <https://doi.org/10.5430/ijhe.v5n3p32>
- Getachew, A., M. Ayele, M. Hailu & F. Tuli. (2020). Effectiveness of soft skill training for students' career development in higher education. *Journal of the Social Sciences*, 48(4).
- Goetz, J. W., Mimura, Y., Desai, M. P., & Cude, B. J. (2008). HOPE or No-HOPE: Merit-based college scholarship status and financial behaviors among college students. *Journal of Financial Counseling and Planning*, 19(1), 12–19.
- Hartini, H., Ramaditya, M., Irwansyah, R., Putri, D. E., Ramadhani, I., Wijiharta, W., Bairizki, A., Firmadani, F., Febrianty, F., Suandi, S., Julius, A., Pangarso, A., Satriawan, D. G., Indiyati, D., Sudarmanto, E., Panjaitan, R., Lestari, A. S., & Farida, N. (2021). Perilaku organisasi (E. Kembauw (ed.). Widina Medina Utama.
- Hasiani, I. P., Kadiyono, A. L., & Susiati, E. (2020). Studi Komparatif Kematangan Karir pada Mahasiswa Rumpun Sains & Teknologi (Saintek) dan Sosial Humaniora (Soshum). *PEMBELAJAR: Jurnal Ilmu Pendidikan, Keguruan, dan Pembelajaran*, 4(2). <https://doi.org/10.26858/pembelajar.v4i2.13460>
- Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: A structural equation model. *BMC Medical Education*, 20(1), 1–11. <https://doi.org/10.1186/s12909-020-01995-9>
- Hendricks, K. S. (2016). The sources of self-efficacy. *Update: Applications of Research in Music Education*, 35(1), 32–38. <https://doi.org/10.1177/8755123315576535>
- Hermita, M., & Thamrin, W. P. (2015). Metacognition toward academic self-efficacy among Indonesian private university scholarship students. *Procedia - Social and Behavioral Sciences*, 171, 1075–1080. <https://doi.org/10.1016/j.sbspro.2015.01.268>

- Jamil, A. (2018). Differences in student self-efficacy by gender. *HONAI: International Journal for Educational, Social, Political & Cultural Studies*, 1(2), 115–128.
- Kee, E. . (2022). Factors affecting academic stress: Comparison of students studying in Malaysia and Ireland [National College of Ireland]. In Norma Smurfit Library. <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders>
- Majer, J. M. (2006). Beliefs in Educational Success Test (BEST).
- Mullikin, E. A., Bakken, L. L., & Betz, N. E. (2007). Appraising research self-efficacy in physician-scientists: The clinical research appraisal inventory. *Journal of Career Assessment*, 15(3), 367–387.
- Munsch, A. (2021). Millennial and generation Z digital marketing communication and advertising effectiveness: A qualitative exploration. *Journal of Global Scholars of Marketing Science*, 31(1), 10–29. <https://doi.org/10.1080/21639159.2020.1808812>
- Murphy, S. E., & Johnson, S. K. (2016). Leadership and leader developmental self-efficacy: Their role in enhancing leader development efforts. *New Directions for Student Leadership*, 149, 73–84. doi:10.1002/yd.20163
- Oduaran, C. ., & Akanni, A. (2019). Perceived stress effect and socio-demographic factors in substance use: A study of undergraduate students in a South African University. *Studies on Ethno-Medicine*, 13(2), 17–21.
- Omar, M., Bahaman, A. H., Lubis, F. A., Ahmad, S. A. S., Ibrahim, F., Aziz, S. N. A., Ismail, F. D., & Tamuri, A. R. Bin. (2020). Perceived academic stress among students in Universiti Teknologi Malaysia. *Proceedings of the International Conference on Student and Disable Student Development 2019 (ICoSD 2019) Perceived*, 470, 115–124. <https://doi.org/10.2991/assehr.k.200921.021>
- Portoghese, I., Galletta, M., Porru, F., Burdorf, A., Sardo, S., D'Aloja, E., Finco, G., & Campagna, M. (2019). Stress among university students: Factorial structure and measurement invariance of the Italian version of the Effort-Reward Imbalance student questionnaire. *BMC Psychology*, 7(1), 1–7. <https://doi.org/10.1186/s40359-019-0343-7>
- Ramachandiran, M., & Dhanapal, S. (2018). Academic stress among university students: A quantitative study of generation y and z's perception. *Pertanika Journal of Social Sciences & Humanities*, 26(3).
- Salsabila, I. (2020). Memerangi titik jenuh kuliah online di masa pandemi COVID-19. *PsyArXiv*, 1(31), 1–10.
- Seemiller, C. & Grace, M. (2016). Generation Z goes to college. Jossey-Bass
- Sharma, M., Devi, M., Dangoria, R., & Jain, V. (2022). Literature enhances communication skills: A comprehensive review. *World Journal of English Language*, 12(3), 157-163.
- Shorty, G. (2018). Factors related to academic stress and persistence decisions of diné college students. In Arizona State University Library. Arizona State University.
- Spronken-Smith, R., Bond, C., McLean, A., Frielick, S., Smith, N., Jenkins, M., Marshall, S. (Stephen J., & Ako Aotearoa National Centre for Tertiary Teaching Excellence. (2013). How to engage with a graduate outcomes' agenda: A guide for tertiary education institutions. [https://orapp.aut.ac.nz/bitstream/handle/10292/12485/graduate-outcomes-final-report %281%29.pdf?sequence=3&isAllowed=y](https://orapp.aut.ac.nz/bitstream/handle/10292/12485/graduate-outcomes-final-report%281%29.pdf?sequence=3&isAllowed=y)
- Tachine, A. ., Cabrera, N. ., & Bird, E. Y. (2017). Tachine, A. R., Cabrera, N. L., & Yellow Bird, E. (2017). Home away from home: Native American students' sense of belonging during their first year in college. *The Journal of Higher Education*, 88(5), 785–807.
- Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, 78(4), 751–796. <https://doi.org/10.3102/0034654308321456>
- Yikealo, D., Yemane, B., & Karvinen, I. (2018). The level of academic and environmental stress among college students: A case in the college of education. *Open Journal of Social Sciences*, 06(11), 40–57. <https://doi.org/10.4236/jss.2018.611004>
- Zamroni, Hidayah, N., Ramli, M., & Hambali, I. M. (2019). Academic stress and its sources among first-year students of Islamic higher education in Indonesia. *International Journal of Innovation, Creativity and Change*, 5(4), 535–551.
- Zhao, X., Selman, R. ., & Haste, H. (2015). Academic stress in Chinese schools and a proposed preventive intervention program. *Cogent Education*, 2(1).