
Gender, Ethnicity, Family Socio-Economics, and Grit (A Islamic Higher Education Students Context)

Ahmad Juhaidi

Antasari State Islamic University Antasari Banjarmasin, Indonesia
ahmadjuhaidi@uin-antasari.ac.id

Abstract

Grit is a non-cognitive factor that is crucial in achieving success in education. The purpose of this study is to verify differences in grit and its two aspects (consistency and perseverance) between gender and ethnicity in Islamic higher education students. The study also verified the correlation between parents' education levels, family economic background, grit total, consistency of interest, and perseverance of effort. This research is field research with a quantitative approach. The participants amounted to 267 students of Antasari State Islamic University. Convenience techniques and snowballing sampling determined participants. Researchers used descriptive statistics, the Mann-Whitney U, Kruskal Wallis H, and Spearman's Rank Correlation test to analyze the data. The results showed no significant differences in total grit levels and its aspects between gender and ethnicity (Sig.>0.005). Dayak ethnic minorities are more persistent and grittier than the majority ethnicity, Banjar, but not significant. Parental education does not correlate with total grit and both aspects. The influence of gender, ethnicity, and socio-economic background on grit is also determined by the type of education students attend.

Keywords: Consistency of Interest; Grit; Perseverance of Effort

Introduction

Grit is a non-cognitive aspect that is an essential factor in increasing student academic achievement. Grit consists of consistency of interest and persistent effort (Duckworth & Quinn, 2009). Studies have proven that grit affects students' academic performance. Akin and Arslan concluded that grit correlated significantly with increased academic achievement orientation (Akin & Arslan, 2014). Grit affects student anxiety (Xiao et al., 2023), students burnout (Jumat et al., 2020), and academic performance (Bennett et al., 2020)1/4/2024 6:55:00 PM. In first-year students, grit correlates with grade point average (Akos & Kretchmar, 2017). Studies at military colleges show that the effect of grit on academic achievement/grades is more significant in male students than female students (Whipple & Dimitrova-Grajzl, 2021). Grit is associated with student achievement in mathematics (Flanagan & Einarson, 2017) and ninth grade students. In ethnic minority communities, grit is significantly correlated with student achievement in the language (Zhao & Wang, 2023), and weakly correlated in nursing (Halperin & Eldar Regev, 2021). The research shows that grit correlates with student academic achievement in various variations (Jiang et al., 2019). The previous research shows that grit correlates with student academic achievement in various variations.

On the other hand, the study of grit in a demographic context is also seen from a gender and ethnic perspective. In women, grit correlates with passion and mindset, but in men, grit does not connect with mindset (Sigmundsson et al., 2020). Male student-athletes have a higher level of grit than female student-athletes (Criticos et al., 2020). In contrast to these findings, other studies prove that gender does not affect student grit (Ain et al., 2021). Related to ethnicity, studies in the United States show that ethnic minorities face more significant sociocultural problems and academic difficulties (Loo & Rolison, 1986)

and they have higher levels of grit than other ethnicities (Bennett et al., 2021). Minority (Afro-American) students strive harder for success (Young-Brice & Dreifuerst, 2020). The previous research shows ethnic background impacts their grit in the educational process. Further, grit correlates with student academic achievement in various variations.

Grit is also observed from the socio-economic point of view of the family. Family economic levels were not significantly correlated with high school students' fortitude levels (Teeter, 2020). In contrast, Daniel and Blake concluded that students from low-income families tend to have higher levels of grit than other students. This grit was formed when they decided to continue their education at universities with limited financial resources (Terry & Peck, 2020). In addition to the economic level of the family, the education level of the parents is a factor that is closely observed. Parental education is also correlated with kindergarten students' persistence level (Sutter et al., 2022). In contrast, Kwon found that parents' education levels were negatively associated with student consistency in the United States and South Korea (Kwon, 2021).

Studies on students' cultural backgrounds and attitudes/behaviours have been widely conducted. Lina et al. concluded that the altruistic attitude of students from North Kalimantan who were studying in East Java was in the moderate category (Lina et al., 2023). Although unrelated to grit, the study looked at students' cultural backgrounds. The study did not mention the ethnicity of students but rather a regional origin. Muhibbin and Wulandari also conducted studies on students' grit in the Indonesian context using a systematic literature review method. They found eleven articles about student grit in the 2016-2020 period.

These articles show that grit affects academic achievement and career choices. According to them, grit correlates with the father's parenting, meaning of life, mindset, school welfare, self-control, and life satisfaction (Muhibbin & Wulandari, 2021). Other studies focus on the grit of kyai in Islamic boarding schools (Salsabila et al., 2022) and explain the concept of grit with a systematic literature review method (Tualeka & Bashori, 2023). A case at the Faculty of Psychology, Mercubuna University, shows that working students have more grit than non-working students (Widodo, 2022). Hope affects the grit of Qur'an memorizer (Fuadi & Apriliawati, 2023).

These studies focus on grit but have not looked more comprehensively at the relationship between grit and other variables. Grit denotes the steadfastness and enduring persistence essential in attaining long-term objectives. Although traditionally perceived as a relatively stable characteristic, empirical research demonstrates the pliability of grit. Therefore, investigating the role of grit concerning teacher autonomy support and the social proficiency of undergraduate students holds considerable significance, as it may yield valuable insights for crafting interventions or preventative measures. Existing scholarly literature consistently illustrates the positive correlation between grit and achievement across diverse academic domains, including the collegiate sphere. However, scant attention has been devoted to exploring the potential nexus between grit and outcomes beyond academic realms. This aspect merits due consideration in the aims of this research. On the other hand, the analysis has yet to respond to Islamic higher education students, the second largest group after general higher education students. This research will complement these previous studies, especially related to variables that correlate with the grit and context of Islamic higher education.

This study aims to verify the relationship between gender, ethnicity, family socio-economic background, and the level of grit of Islamic higher education (IHE) students. Therefore, the hypothesis to be tested are

- H_1: the level of consistency of female students is significantly different from that of men;
- H-2: the level of persistence of female students' efforts differs significantly from men's;
- H-3: the level of grit (total grit) of male students differs significantly from that of female students;
- H-4: the level of student consistency differs significantly from one ethnicity to another;
- H-5: the level of student persistence differs significantly from one ethnicity to another;
- H-6: students' level of grit (total grit) differs significantly between ethnicities;
- H-7: parents' education levels correlated significantly with students' level of consistency;
- H-8: parents' education level correlated significantly with students' level of persistence;
- H-9: parents' education level correlated significantly with students' level of grit (total grit);
- H-10: the level of family economics correlated significantly with the level of consistency of students;
- H-11: the level of family economics correlated significantly with the level of student persistence;
- H-12: the family's economic level correlates significantly with students' grit (total grit).

The outcomes of this investigation are poised to offer a theoretical advancement within the realm of educational administration analysis. Specifically, this research addresses a theoretical gap concerning the influence of gender, ethnicity, and socio-economic factors within families on students' resilience, consequently impacting educational achievements within Islamic higher education institutions. Furthermore, from a practical standpoint, the study's findings are anticipated to contribute novel perspectives to educational management. These perspectives diverge from conventional emphases on cognitive aspects and overt educational resources, instead directing attention toward the often overlooked invisible and non-cognitive inputs.

Method

This research is a field research with a quantitative approach. This research used (1) the Mann Whitney U Test to verify differences in the level of grit of male and female students; (2) the Kruskal Wallis H test to verify differences in the level of grit between students' ethnic backgrounds; and (3) Spearman's Rank Correlation to examine the relationship between family economic background, parents' education level, and student's level of grit. The study participants were Antasari State Islamic University Banjarmasin students who voluntarily responded to the questionnaire they received. The sample is determined by the convenience sampling technique combined with the snowballing sampling technique. Two hundred sixty-seven students from Antasari State Islamic University Banjarmasin responded. Participants consisted of 271 females and 120 males. The ethnic background of the participants' parents was dominated by Banjar Ethnicity (68%). Data collection using questionnaires distributed online. The measurement of grit adopts instruments developed by Duckworth and Quinn (Duckworth & Quinn, 2009).

Results and Discussion

1. Descriptive statistic

Students' level of grit (total grit) consists of aspects of consistency of their goals or interests and persistence of effort when following the educational process. Student consistency was at an average of 2.52 and lower than the average persistence of 3.19. It indicates that students' persistence level is higher than their level of consistency. The mean (\bar{x}) level of grit (total grit) is 2.92 at a moderate level.

The standard deviation (σ) of all consistency aspect items is below the mean value. That shows the data is well spread around the average numbers, and there is no variation. The data's Cronbach Alpha (α) value is above 0.6, indicating reliable or consistent data despite repeated data collection. The test results can be seen in Table 1 below.

Table 1. Cronbach Alpha (α), mean (\bar{x}), and deviation standard (σ)

	\bar{x}	σ
Consistency ($\alpha = 0,612$)	2,33	2,55
Cons_1	2.22	0.91
Cons_2	2.70	0.90
Cons_5	2.17	0.86
Cons_6	2.23	0.93
Persistence ($\alpha = 0,824$)	3,19	0.60
Pers_1	3.38	0.76
Pers_2	3.40	0.73
Pers_3	3.08	0.81
Pers_4	3.17	0.75
Pers_5	2.89	0.83
Pers_6	3.22	0.79
<i>Grit total</i>	2,76	0.57

Mean (\bar{x}) aspects of consistency of goals/interests and persistence of efforts based on gender and ethnicity show differences. Males tend to be more consistent, while females are more persistent in trying. Females generally have more grit (total grit) than males students.

Judging from ethnic background, the level of grit does not show consistent differences between ethnic majorities and minorities. On the one hand, the ethnic majority (Banjar) can have a higher level of persistence than the ethnic minority (Javanese), but consistency is lower. However, the perseverance of other ethnic minorities (Dayak) is higher than that of the majority ethnicity but is more inconsistent than that of the majority ethnicity. In general, ethnic minorities (Dayak) have a higher level of grit (total grit) than ethnic majorities at universities. It can be seen in Table 2 below.

Table 2. Mean (\bar{x}) of Grit Based-on Gender and Ethnic

	Cons	Per	Gtotal
Gender			
Female	2,33	3,23	2,78
Male	2,34	3,10	2,72
Ethnic			
Banjar	2,30	3,26	2,78
Java	2,42	2,95	2,68
Dayak	2,25	3,40	2,83
Bugis	2,48	2,83	2,65
Lainnya (Madura, Sunda, Mandar, Sasak, dll)	2,52	2,87	2,73
	2,33	3,19	2,76

Note: * * Cons. = Consistency of interest; Per= Persistency of effort; Gtotal= Grit total

The descriptive analysis revealed noteworthy variations in mean (\bar{x}) scores concerning consistency of interest, persistence of effort, and grit (total) across gender and ethnic categories. Specifically, female participants exhibited higher grit (total) scores than their male counterparts, aligning with prior research by Chuented et al. (2023) and Usher

et al., (2019), which similarly underscored higher mean (\bar{x}) grit among female students. Contrarily, in terms of ethnic backgrounds, the descriptive outcomes of this study diverge from the findings presented by Moreno-Hernandez and Mondisa (2021), wherein the dominant ethnicity exhibited higher mean (\bar{x}) grit scores than the majority. However, it is crucial to note that divergent mean scores do not inherently imply statistically significant inferential distinctions, which will be rigorously evaluated in the subsequent section for validation.

2. Hypothesis Verification

Although the average scores differ, statistical tests were performed to prove the significance of the differences. Hypothesis testing H₁, H₂, and H₃ using the Mann-Whitney U Test because the data are not normally distributed. Based on gender differences, statistical calculations of the Mann-Whitney U test yield the Asymp value. Sig. (2-tailed) grit (total grit) and both aspects are more than 0.05 (Sig. >0,05). The results prove that there is no difference in the level of grit and its two aspects (consistency and perseverance/persistence) between female and male students. It indicates that there is no influence of gender on the level of student fortitude. The same is true for consistency, interest and persistence in trying. Thus, H₁, H₂, and H₃ are rejected. The test results can be seen in Table 3 below.

Table 3. Mann-Whitney U Test Result

	Cons.*	Per*	Gtotal*
Mann-Whitney U	7266.500	6421.500	6627.500
Wilcoxon W	25221.500	9502.500	9708.500
Z	-0.184	-1.665	-1.297
Asymp. Sig. (2-tailed)	0.854	0.096	0.195

a. Grouping Variable: Gender

Note: * Cons. = Consistency of interest; Per= Persistency of effort; Gtotal= Grit total

The study found that the level of grit (total) and its two aspects did not differ between female and male students. The study's findings are in line with those of Flanagan and Einarson. They concluded that in mathematics learning, the fortitude of female and male students did not differ significantly (Flanagan & Einarson, 2017). Another opinion states that the level of grit of female and male students does not have a significant difference (bin Shariff et al., 2022; Cui & Yang, 2022; Guo et al., 2023; Hodge et al., 2018). Although females have lower grit than males, the difference is insignificant (Bennett et al., 2021).

On the other hand, the findings of this study contradict the conclusions of other studies that prove that there are differences between women and men in the level of grit. Women and men differ significantly in passion, grit, and mindset (Sigmundsson et al., 2020). In students who are also sportsmen, fortitude also differs between women and men (Criticos et al., 2020). The contradiction between these findings occurs because of differences in the context of the field of science that students study in higher education. Therefore, we can surmise that there is no significant difference in the level of grit of female and male students in Islamic studies. To verify the next hypothesis, The Kruskal-Wallis H test was run. The Kruskal-Wallis H test of the difference in grit (total grit) and the aspect of grit: consistency and persistence between ethnicities show the Asymp value greater than 0.05 (sig.>0.05). Therefore, statistically, it can be concluded that there is no difference in consistency, persistence, and grit (total grit) between ethnic students. It became evidence to reject H₄, H₅, and H₆. In other words, the socio-cultural background reflected by ethnicity doesn't impact students' consistency, persistence, and grit level.. Kruskal-Wallis H test results in table 4 below.

Table 4. Kruskal-Wallis H Test result

	Cons.*	Per*	Gtotal*
Kruskal-Wallis H	2,639	15,660	3,702
df	4	4	4
Asymp. Sig,	0,620	0,004	0,448

a. Grouping Variable: Ethnic

Note: * Cons. = Consistency of interest; Per= Persistency of effort; Gtotal= Grit total

The findings proved no significant differences in the consistency, persistence and total grit level between ethnicities. Although the average score shows that Dayak is more persistent than other ethnicities, the difference is not statistically significant. Ethnic minorities comprise less than 50% of a region's population. The findings of this study are not in line with the conclusions of Bennett et al, who stated that ethnic minorities have a higher level of grit (Bennett et al., 2021; Rindfleisch et al., 2023). Linnell also concluded ethnic background correlated with levels of grit, albeit weak (Linnell, 2018). This study supports findings that prove there is no difference in the level of interethnic student grit (Choi & Loui, 2015; Lee et al., 2021)

The correlation of family socio-economic background with consistency, persistence, and total grit was tested with Spearmen's test. The test shows that the education and economic level of parents did not correlate with the consistency, persistence, and grit (total grit) of students (sig.>0.05). Thus, the study verifies that H_7, H_8, H_9, H_10, H_11, and H_12 are rejected. The results of the correlation test can be seen in Table 5 below.

Table 5. Correlation Test result

		Cons	Per.	Gtotal
Spearman's rho Parent Edu.	Correlation Coefficient	0,067	-0,080	-0,005
	Sig. (2-tailed)	0,274	0,191	0,935
	N	267	267	267
Ec.	Correlation Coefficient	0,023	-0,114	-0,064
	Sig. (2-tailed)	0,709	0,063	0,299
	N	267	267	267

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Note:* Cons. = Consistency of interest; Per= Persistency of effort; Gtotal= Grit total

This finding confirms that family socio-economic background: parents' education level and family economic background do not correlate with the level of grit (total grit), aspects of consistency, and persistence of IHE students. The findings of this study are different from the findings of previous studies. Mathias Vairez et al. found that college students from high-income families tend to have high levels of grit, and students from highly educated families also have higher levels of grit (Mathias Vairez et al., 2022). Parental education and fortitude are related to parents' expectations about their child's education. Parental education is closely associated with parents' educational expectations of their children (Yiji Wang et al., 2016). These academic expectations affect student grit (Won & Lee, 2023).

Low student grit can be suspected because students can easily achieve an Academic Achievement Index above a score of 3.00. Students very rarely do not graduate in one course they take. They saw no effect of grit on increasing GPA. It can be seen from the absence of a correlation between grit and GPA in Table 5. Grit will be built if it experiences failure (Bazelais et al., 2016). On the other hand, fortitude is also positively correlated with long-term goals in the form of professional achievement at work (Renato R. Maaliw et al.,

2022). In other words, this study indicates that students who think their studies have no impact on their professional achievement are less likely to have less grit.

Therefore, this study has limitations in identifying student grit based on the departemen and learning process they follow at IHE. It causes research findings to be unable to verify the relationship between the field of science and the learning process with student grit. On the other hand, IHE is a place of research with a limited sample, so generalization is still limited.

Conclusion

The analysis revealed no significant disparities in student grit concerning gender and ethnic backgrounds. It suggests an absence of discernible influence from gender or ethnicity on the grit levels observed among students within Indonesian higher education institutions (IHEs). Conversely, the study found no correlation between parental education levels and economic backgrounds concerning grit and these dimensions. It implies a lack of association between parental educational attainment, financial status, and the measured aspect of fortitude within this context.

This study highlights the need for future research across diverse educational landscapes and department variations to substantiate the relationship between grit and academic contexts, allowing for more comprehensive generalizations. Furthermore, in practical application, this investigation recommends IHE administrators within higher education institutions offer targeted support to student cohorts displaying lower levels of grit, refraining from basing this support on student characteristics such as ethnicity, gender, or socio-economic backgrounds. Such targeted assistance aligns with a more inclusive and equitable approach to bolstering student resilience within educational settings.

References

- Ain, N. U., Munir, M., & Suneel, I. (2021). Role of emotional intelligence and grit in life satisfaction. *Heliyon*, 7(4), e06829.
- Akin, A., & Arslan, S. (2014). The Relationships between Achievement Goal Orientations and Grit. *TED EĞİTİM VE BİLİM*, 39(175).
- Akos, P., & Kretchmar, J. (2017). Investigating Grit at a Non-Cognitive Predictor of College Success. *The Review of Higher Education*, 40(2), 163–186.
- Bazelaïs, P., Lemay, D. J., & Doleck, T. (2016). How Does Grit Impact College Students' Academic Achievement in Science?. *European Journal of Science and Mathematics Education*, 4(1), 33–43.
- Bennett, D., McCarty, C., & Carter, S. (2020). The relationship between grit and academic performance in the classroom. *Journal for Economic Educators*, 20(2), 1–15.
- Bennett, D., McCarty, C., & Carter, S. (2021). Grit, Financial Stress, and Academic Success for FGCS. *Journal of Instructional Pedagogies*, 26.
- bin Shariff, M. I. A., Sulaiman, W. S. W., & Khairudin, R. (2022). *Exploring the Relationship between Grit and Flourishing: Are There Gender Differences?*
- Choi, D. S., & Loui, M. C. (2015). Grit for engineering students. *2015 IEEE Frontiers in Education Conference (FIE)*, 1–2.
- Chuented, P., Puranitee, P., Pakakasama, S., & Meepanya, S. (2023). Factors affecting residents' internal motivation, grit, and well-being. *BMC Medical Education*, 23(1), 779.
- Criticos, M., Layne, T., Simonton, K., & Irwin, C. (2020). Gender differences with anxiety, perceived competence, and grit in collegiate track and field throwers. *Journal of Physical Education and Sport*, 20(5), 2751–2759.

- Cui, T., & Yang, Y. (2022). Social relationships and grit in English as a foreign language learning among high school students: A three-wave longitudinal study. *Frontiers in Psychology, 13*, 1038878.
- Duckworth, A. L., & Quinn, P. D. (2009). Development and Validation of the Short Grit Scale (Grit-S). *Journal of Personality Assessment, 91*(2), 166–174.
- Flanagan, K. M., & Einarson, J. (2017). Gender, Math Confidence, and Grit: Relationships with Quantitative Skills and Performance in an Undergraduate Biology Course. *CBE—Life Sciences Education, 16*(3), ar47.
- Fuadi, A. N., & Apriliawati, D. (2023). Peran Hope (Al-Raja’) terhadap Grit pada Mahasiswa Penghafal Al-Qur’an. *MOTIVA JURNAL PSIKOLOGI, 5*(2), 91.
- Guo, W., Bai, B., Zang, F., Wang, T., & Song, H. (2023). Influences of motivation and grit on students’ self-regulated learning and English learning achievement: A comparison between male and female students. *System, 114*, 103018.
- Halperin, O., & Eldar Regev, O. (2021). Predicting academic success based on perseverance and passion for long-term goals (grit) among nursing students: Is there a cultural context? *Nurse Education Today, 100*, 104844.
- Hodge, B., Wright, B., & Bennett, P. (2018). The Role of Grit in Determining Engagement and Academic Outcomes for University Students. *Research in Higher Education, 59*(4), 448–460.
- Jiang, W., Xiao, Z., Liu, Y., Guo, K., Jiang, J., & Du, X. (2019). Reciprocal relations between grit and academic achievement: A longitudinal study. *Learning and Individual Differences, 71*, 13–22.
- Jumat, M. R., Chow, P. K.-H., Allen, J. C., Lai, S. H., Hwang, N.-C., Iqbal, J., Mok, M. U. S., Rapisarda, A., Velkey, J. M., Engle, D. L., & Compton, S. (2020). Grit protects medical students from burnout: A longitudinal study. *BMC Medical Education, 20*(1), 266.
- Kwon, H. W. (2021). What Can Sociology Say About Grit? A Cross-Cultural Exploration of the Relationships between Socioeconomic Status, Sense of Control, and Grit. *Socius, 7*, 23780231211005216.
- Lee, D. H., Reasoner, K., Lee, D., Davidson, C., Pennings, J. S., Blazar, P. E., Frick, S. L., Kelly, A. M., LaPorte, D. M., Lese, A. B., Mercer, D. M., Ring, D., Salazar, D. H., Scharschmidt, T. J., Snoddy, M. C., Strauch, R. J., Tuohy, C. J., & Wongworawat, M. D. (2021). Is Grit Associated with Burnout and Well-being in Orthopaedic Resident and Faculty Physicians? A Multi-institution Longitudinal Study Across Training Levels. *Clinical Orthopaedics & Related Research, 479*(12), 2576–2586.
- Lina, L., Hidayah, N., & Setiyowati, A. J. (2023). Analisis Sikap Altruis Mahasiswa Perantau Kalimantan Utara di Jawa Timur. *Munaddhomah: Jurnal Manajemen Pendidikan Islam, 4*(4), 937–949.
- Linnell, D. J. (2018). *Predictors of grit: A multilevel model examination of demographics and school experiences.*
- Loo, C. M., & Rolison, G. (1986). Alienation of Ethnic Minority Students at a Predominantly White University. *The Journal of Higher Education, 57*(1), 58–77.
- Mathias Vairez, Frank Gomez, Carolyn Gentle-Genitty, Janeen Quiroz, & Olga Manzanero. (2022). Effects of Risk Factors on Belizean Adolescents’ Academic Behaviors and Grit after Prolonged Absence During the COVID-19 Pandemic. *Continuing Education.*
- Moreno-Hernandez, A. D., & Mondisa, J.-L. (2021). Differences in the Self-Perceptions of Resilience, Grit, and Persistence among First-Year Engineering Undergraduates. *International Journal of Engineering Education, 37*(3), 701–711.

- Muhibbin, M. A., & Wulandari, R. S. (2021). The Role of Grit In Indonesian Student. *Psychosophia: Journal of Psychology, Religion, and Humanity*, 3(2), 112–123.
- Renato R. Maaliw, Karen Anne C. Quing, Julie Ann B. Susa, Jed Frank S. Marqueses, Ace C. Lagman, Rossana T. Adao, Ma. Corazon Fernando - Raguro, & Ranie B. Canlas. (2022). Clustering and Classification Models For Student's Grit Detection in E-Learning. *2022 IEEE World AI IoT Congress (AIIoT)*.
- Rindflesch, A., Barnes, S., Craig, H., Zebelian, C., & Hollman, J. (2023). Do Student Physical Therapists Have Grit? The Self-Perceived Effortful Persistence of Students in Doctor of Physical Therapy Programs. *Journal of Allied Health*, 52(1), 44–50.
- Salsabila, S. N., Subasman, I., Nur, A. Z., & Anshori, A. I. (2022). Nilai-Nilai Ketabahan (Studi Grit) Deskripsi Family Support Scale dan Habitiasi di Pondok Pesantren. *Jurnal Fakultas Ilmu Keislaman Kuningan*, 3(2), 158–168.
- Sigmundsson, H., Haga, M., & Hermundsdottir, F. (2020). Passion, grit and mindset in young adults: Exploring the relationship and gender differences. *New Ideas in Psychology*, 59, 100795.
- Sutter, M., Untertrifaller, A., & Zoller, C. (2022). Grit increases strongly in early childhood and is related to parental background. *Scientific Reports*, 12(1), 3561.
- Teeter, J. A. (2020). *Noncognitive Characteristics and Family Income: The Impact of Socioeconomic Status on Grit Levels and Mindset Types* [Lindenwood University].
- Terry, D., & Peck, B. (2020). Factors That Impact Measures of Grit among Nursing Students: A Journey Emblematic of the Koi Fish. *European Journal of Investigation in Health, Psychology and Education*, 10(2), 564–574.
- Tualeka, T. D., & Bashori, K. (2023). Menjelajahi Grit: Sebuah Kajian Literatur Naratif. *JHIP-Jurnal Ilmiah Ilmu Pendidikan*, 6(8), 6340–6346.
- Usher, E. L., Li, C. R., Butz, A. R., & Rojas, J. P. (2019). Perseverant grit and self-efficacy: Are both essential for children's academic success? *Journal of Educational Psychology*, 111(5), 877–902.
- Whipple, S. S., & Dimitrova-Grajzl, V. (2021). Grit, fit, gender, and academic achievement among first-year college students. *Psychology in the Schools*, 58(2), 332–350.
- Widodo, Y. A. (2022). *Studi Deskriptif Gambaran Grit pada Mahasiswa Psikologi Universitas Mercu Buana Jakarta* [Skripsi, Universitas Mercu Buana Bekasi].
- Won, S., & Lee, Y. J. (2023). Adolescent students' grit: Do parents' grit and educational expectations matter? *Contemporary Educational Psychology*, 72, 102137.
- Xiao, F., Sun, L., Zeng, Y., & Zhan, J. (2023). Examining the association between two aspects of grit and test anxiety among Chinese University students. *Current Psychology*, 42(13), 10977–10986.
- Yiji Wang, Ciping Deng, & Xiangdong Yang. (2016). Family Economic Status and Parental Involvement: Influences of Parental Expectation and Perceived Barriers. *School Psychology International*.
- Young-Brice, A., & Dreifuerst, K. T. (2020). Exploring Grit Among Black Prelicensure Nursing Students. *Nursing Education Perspectives*, 41(1), 46–48.
- Zhao, X., & Wang, D. (2023). Grit, emotions, and their effects on ethnic minority students' English language learning achievements: A structural equation modelling analysis. *System*, 113, 102979.