Universitas Ahmad Dahlan

Jurnal Psikologi Terapan dan Pendidikan
Vol. 6, No. 2 November 2024, pp. 150-160
ISSN 2715-2456
http://journal.uad.ac.id/index.php/Psikologi/index

Academic buoyancy *training* to improve *school engagement for* high school students in Cimahi

Alicia Yosi [a,1*], Jane Savitri [b,2], Meilani Rohinsa [c,3]

[a,b,c] Faculty of Psychology, Universitas Kristen Maranatha, Bandung, Indonesia
[1] studyaliciayosireviana@gmail.com; [2] jane.savitri@psy.maranatha.edu; [3] meilani.rohinsa@psy.maranatha.edu
*Corresponding Author

Submitted: 21 August 2024 *Revised: 19 October 2024* *Accepted: 22 December 2024*

KEYWORDS

academic buoyancy; school engagement; students high school; training.

ABSTRACT

High school students are more susceptible to feelings of boredom in their learning due to the increasingly complex academic expectations that arise during adolescence, which can lead to a decrease in school engagement among students. This study aims to determine the impact of academic buoyancy training on enhancing school engagement. The research employed an experimental method utilizing a purposive sampling technique to select a sample of 37 grade XI students from Santa Maria 3 High School in Cimahi City, all of whom exhibited low levels of school engagement. The intervention consisted of academic buoyancy training provided to 18 low-engaged students, while 19 students were assigned to a control group. Following the intervention, school engagement data were analyzed using the SPSS 25.0 software, employing differential test analysis techniques, specifically the Mann-Whitney U and Wilcoxon Rank statistical tests. The results indicated that the academic buoyancy training intervention significantly improved school engagement among high school students. Furthermore, the effect size analysis revealed that the academic buoyancy training intervention had a moderate impact on enhancing school engagement in this population.

This is an open-access article under the CC–BY-SA License.

Introduction

School engagement is crucial for the success of student education, as it encourages positive behavior and ensures that continuing the learning process operates effectively and optimally (Dixson, 2015). School engagement is a key factor in students' academic success, particularly regarding learning and achievement (Fredricks et al., 2019; Hiver et al., 2021; Wullur, 2021). Higher school engagement levels correlate with high academic grades (Sa'adah & Ariati, 2020). Mafaza et al. (2021) characterized School engagement as participation in educationally effective practices, both inside and outside the classroom, which leads to various measurable outcomes. According to Fredricks et al. (2004), school engagement encompasses student involvement in three dimensions: cognitive engagement, behavioral engagement, and emotional engagement. Students demonstrated this involvement through positive thinking and proactive attitudes toward learning activities, both academically and non-academically.

 ISSN 2715-2456

Unfortunately, high school students still exhibit low levels of school engagement (Octavia & Yusuf, 2018; Nurhidayatullah et al., 2019).

Based on the results of the study conducted by Octavia and Joseph (2018) at SMA Negeri "X" Bandung, it was found that 70% of 12th-grade high school students exhibit low levels of school engagement. Furthermore, research by Nurhidayatullah et al. (2019) revealed that 41% of high school students at a boarding school in Bandung also demonstrate low school engagement. Additionally, school engagement positively and significantly affects students' academic achievement (Jian, 2022). This phenomenon of low school engagement is also observed among students at Santa Maria 3 Cimahi High School, particularly in grade XI. Several symptoms were reported by most XI students, including 75.9% (106 students) feeling lazy to study, 75% expressing boredom with their schoolwork, and 58.6% (82 students) experiencing difficulties with their peers. These symptoms contribute to the low levels of school engagement experienced by most grade XI students. This trend may be attributed to high school students feeling more disengaged from learning than their junior high school counterparts (Steinberg, 2017).

This condition is common among students, particularly during adolescence, as academic expectations change and become more complex, and student responsibilities increase with higher levels of study (Cheung et al., 2018). According to Qonita et al. (2021), feelings of fatigue, boredom, laziness, and stress during learning can lead to decreased student engagement in the educational process. This lack of involvement, or school engagement, often stems from students' negative perceptions of learning, which they may view as burdensome, ultimately affecting their overall engagement in school. Experiencing fatigue, boredom, laziness, and stress is a natural response to daily hassles. It is important to recognize that everyone has the potential to encounter daily stressors throughout their lives (Smith, 2020; Rohinsa et al., 2020), including high school students.

When facing daily hassles (daily obstacles), not all students succeed in overcoming them, although some do (Smith, 2020). When students cannot navigate academic hurdles, it can decrease student engagement (Dahal et al., 2022). If students cannot address the academic challenges, problems, and delays that constitute their daily obstacles, they may become increasingly disconnected from learning activities, both emotionally and behaviorally, resulting in low school engagement (Rohinsa, 2024). According to Molsberry (2021), adaptive coping strategies positively correlate with students' school engagement and their ability to reengage after experiencing setbacks. The capacity of students to overcome daily hassles and setbacks through adaptive coping strategies is referred to as academic buoyancy.

Academic buoyancy refers to students' ability to effectively cope with challenges encountered in their daily lives during their studies and to thrive in an environment often characterized by setbacks (Martin & Marsh, 2008; Smith, 2020). According to Collie et al. (2017), students in Asia and the Pacific who exhibit academic buoyancy demonstrate perseverance, focus on classroom learning activities, and a sense of enthusiasm, interest, and pleasure towards these activities. These traits are indicators of school engagement among students. Students are considered capable of coping with problems, setbacks, and daily academic challenges-essentially exhibiting academic buoyancy—if they can effectively resolve issues (Datu & Yuen, 2018). By cultivating academic buoyancy, students can successfully constructively address daily challenges.

Academic buoyancy significantly influences student engagement (Rohinsa et al., 2020). Additional research indicates that higher levels of academic buoyancy are associated with increased engagement (Datu & Yang, 2016). According to Rohinsa et al. (2019), academic buoyancy positively influences engagement by 32.5%. Furthermore, research conducted by Brigitha and Rohinsa (2023) demonstrates that academic buoyancy plays a role in enhancing engagement in learning activities by 36.5%. This finding suggests that the higher the level of academic buoyancy among students, the greater their engagement in classroom learning

activities (Rohinsa et al., 2020). This finding aligns with the research presented by Granziera et al. (2022), highlighting the positive impact of academic buoyancy on student engagement. Overall, academic buoyancy can serve as a predictor of student engagement in academic activities within the classroom (Smith, 2020; Jang et al., 2016; Tarbetsky et al., 2016).

According to Chahardeh (2020), implementing academic buoyancy training has enhanced engagement among high school students. Additionally, research by Shirkavand (2023) indicates that academic buoyancy education can also improve school engagement in junior high school students. For high school students to achieve optimal school engagement, they must possess the ability to overcome daily challenges that may hinder their involvement. Therefore, it is essential to equip students with academic buoyancy skills through targeted training. This study aims to review how academic buoyancy training can enhance school engagement among high school students. This research offers a novel contribution by elucidating the impact of academic buoyancy training on improving school engagement in high school students across cognitive, emotional, and behavioral domains, a topic that has not been previously explored in Indonesia. Consequently, the purpose of this study is to assess the effectiveness of academic buoyancy training in increasing school engagement among students at Santa Maria 3 High School in Cimahi City and examine the effects of this training on their overall school engagement.

Method

This study employs a quantitative research approach utilizing a quasi-experimental method, specifically a randomized pretest-posttest control-group design. This design was implemented to establish a comparison group, or control group, to assess the differences between the treated and untreated groups (Creswell & Creswell, 2018).

This research was conducted in September 2023 at SMA Santa Maria 3 Cimahi, focusing on a sample of grade XI students. The principal and the curriculum committee obtained permission to conduct the study. The sampling technique employed in this study was non-probability sampling, precisely the purposive sampling method. Purposive sampling is a technique used to select samples based on specific criteria and considerations. This method allows researchers to identify and select participants who meet predetermined characteristics relevant to the study (Turner, 2020). In this research, the sample criteria were aligned with the characteristics of grade XI students exhibiting low school engagement. Consequently, 37 students who met the criteria for low school engagement were identified as the research sample.

Researchers randomly divided 37 students who met the specified criteria into 18 students in the experimental group and 19 in the control group. Both groups completed a pretest questionnaire on the day before the academic buoyancy training commenced. Researchers collected data from these 37 students, which the researcher subsequently utilized in the data analysis process.

School engagement variables and their dimensions were measured on both the pretest and post-test using a school engagement questionnaire developed by Savitri et al. (2016), based on the framework established by Fredrick et al. (2004). The validity of the school engagement system in this study was found to range from r = 0.4 to 0.7, with a Cronbach's alpha reliability coefficient of $\alpha = 0.972$. Therefore, this measurement tool can be considered valid and reliable.

The researcher developed the academic buoyancy training module, drawing on previous research modules by Chahardeh (2020) and Smith (2020). As indicated in Table 1, this training program consists of five sessions. In the first session, students were encouraged to identify the daily hassles they encounter in school activities, recognize their ability to overcome them and establish priorities for addressing them. The second session prompted students to identify the problem—and emotion-focused—coping strategies employed when facing daily hassles and to evaluate whether these strategies effectively resolved the issues at hand. The third session

 ISSN 2715-2456

provided students with an explanation of the stages of coping strategies that can be utilized to manage daily hassles. This process begins with prioritizing the daily hassles they wish to address based on their level of importance, followed by applying the steps: stop, accept, refresh, and continue. In the fourth session, students practiced implementing a specific coping strategy to tackle daily hassles. Finally, in the fifth session, students began to apply these coping strategies through team-based game activities.

The researchers administered a post-test seven days after the training for both the experimental and control groups. To mitigate the potential for maturation effects in this study, the researcher altered the order of the items and utilized different media to administer the school engagement questionnaire. Additionally, students completed a paper-based questionnaire during the pretest, while the post-test was conducted online using Google Forms. The study implemented this approach to reduce the likelihood that students would become familiar with the items throughout the study.

Table 1. Summary of Training Academic Buoyancy (Let's Cope and Be Active)

Session	Duration	Activities	Purpose
1	75 minutes	• Providing material on obstacle introduction • Material to recognize one's potential and identify daily hassles using worksheets • Make daily hassles a priority, consider them, and then share.	Understanding daily hassles and the importance of attitudes to overcome daily hassles Prioritize issues that need to be addressed immediately.
2	120 minute	• Sharing reactions/what to do when facing problems • Materials on the types of coping • Practice grouping coping types using worksheets	Recognizing the type of problem-solving done previously. Creating an effective action plan to solve problems
3	120 minutes	• Sharing and discussion about which solution is better to use (done with mini-games) • Material on how to deal with problems with the implementation of stop, accept, refresh, and continue • Exercises to build coping through case studies with groups • Group case study presentations, discussions, and discussions	Applying the stages of the problem-solving strategy to a problem
4	120 minutes	• Discussing one of the problem-solving strategies (seeking support/help-seeking) • Sharing sessions with support groups with mentors	Apply the problem-solving process to new problems. Develop a problem-solving strategy independently.
5	110 minutes	• Implementing the stages of successful form coping and general tendency toward adaptive that have been learned previously in sessions 1-4, through post-to-post games with the group	Have the skills to turn problems into challenges Able to create problem-solving to solve the challenges faced

 ISSN 2715-2456

Result

37 Grade XI students with low school engagement were sampled for this study. The majority of the sample, comprising 67.6%, was male. Among the 37 students included in the research, 18 were assigned to the experimental group, while 19 were placed in the control group.

Table 2. Description of Paired Data in Pretest and Post-test School Engagement

No.	Experimental Group				Control Group			
	Name	Pretest	Post-Test	Score changes	Name	Pretest	Post-test	Score changes
1	ANR	72	73	1	AH	68	68	0
2	ABM	77	78	1	BM	70	76	0
3	AXLE	78	81	3	BR	79	90	1
4	EXIST	62	76	6	CG	79	88	1
5	AJ	76	69	-7	CM	79	82	3
6	CJ	76	77	1	FM	75	69	-6
7	CXP	72	84	12	FV	70	72	2
8	DRH	73	77	4	GJ	73	82	1
9	GF	75	73	-2	GD	77	72	-5
10	JT	65	74	9	GG	78	73	-5
11	KJ	79	74	-5	HA	78	77	-1
12	MILES	66	77	11	JE	75	85	10
13	M	77	78	1	MC	78	73	-5
14	MT	79	82	3	NC	79	77	-2
15	RS	78	81	3	NT	79	76	-3
16	SB	79	83	4	OG	78	69	-9
17	BC	79	81	2	RD	73	74	1
18	ZG	74	80	6	RS	71	67	-4
19	-	-	-	-	SRT	78	77	-1
	Average	74,3	77,7			75,5	76	

Based on Tables 2 and 3, it is evident that the initial conditions of school engagement (SE) before the academic buoyancy training intervention in both the control and experimental groups are not significantly different. This result indicates that at the time the pretest was administered (before the academic buoyancy training), all students in both groups were proven to be in comparable conditions.

Table 3. Mann-Whitney U Difference Test Results

Variable	Z	Sig.	Information
Pretest Experiment and Control Group			
School Engagement (SE)	0.707	0.48	Insignificant
Cognitive Engagement (CE)	0.245	0.807	Insignificant
Emotional Engagement (EE)	0.061	0.951	Insignificant
Behavior Engagement (BE)	1.141	0.254	Insignificant
Post-test Experiment and Control Group			
School Engagement (SE)	2.809	0.037	Significant
Cognitive Engagement (CE)	2.452	0.014	Significant
Emotional Engagement (EE)	1.160	0.036	Significant
Behavior Engagement (BE)	0.509	0.611	Insignificant

 ISSN 2715-2456

Table 3 indicates that following academic buoyancy training in the experimental group, there was a significant difference in school engagement of 0.037 ($p<0.05$) compared to the control group. Additionally, this study revealed a significant difference of 0.014 ($p<0.05$) in the cognitive engagement dimension and a significant difference of 0.036 ($p<0.05$) in the emotional engagement dimension. These findings suggest notable differences in school, cognitive, and emotional engagement between the control and experimental groups. This trend is further illustrated in Table 2, which shows a higher average school engagement in the experimental group compared to the control group. However, the investigation also observed no significant difference in behavioral engagement between the two groups before and after the implementation of academic buoyancy training.

Based on Table 4 below, the experimental group exhibited a significant change in school engagement, with a significance value of 0.018 ($p<0.05$). Additionally, as shown in Table 2, the average school engagement in the experimental group increased following the training. This result indicates that after participating in the academic buoyancy training, the grade XI students experienced an enhancement in school engagement. Furthermore, the study revealed a significant change in cognitive engagement, with a significance value of 0.005 ($p<0.05$), and in emotional engagement, which had a significance value of 0.011 ($p<0.05$). However, it is important to note that no change in behavioral engagement was observed during this study.

Table 4. Wilcoxon Rank Difference Test Results

Group	Variable	Z	Sig.	Information
Experiment	Pretest – Post-test SE	2.356	0.018	Significant
	Pretest – Post-test CE	2.782	0.005	Significant
	Pretest – Post-test EE	2.541	0.011	Significant
	Pretest – Post-test BE	0.671	0.502	Insignificant
Control	Pre-test SE – Post-test SE	0.218	0.827	Insignificant
	Pretest – Post-test CE	1.029	0.303	Insignificant
	Pretest – Post-test EE	1.250	0.211	Insignificant
	Pretest – Post-test BE	0.316	0.752	Insignificant

The effect size was measured to determine the strength of the influence of the treatment provided, specifically academic buoyancy training, on the changes in self-efficacy (SE) observed in students, using the formula from Corder and Foreman (2014). The academic buoyancy training demonstrated a moderate influence on enhancing school engagement, with an effect size of 0.38.

Discussion

The results of this study indicate that training in Academic Buoyancy significantly enhances School Engagement among high school students. These findings corroborate previous research conducted by Chahardeh (2020) and Shirkavand et al. (2023), demonstrating that training in Academic Buoyancy effectively increases engagement among high school students. Additionally, this study supports earlier findings from Rodrics and Magre (2024) and Brigitha and Rohinsa (2023), which assert that Academic Buoyancy plays a crucial role in fostering School Engagement in High School Students. When students are buoyant, it motivates them to perform better academically by effectively coping with the daily hassles in academic life. This positive mindset encourages them to exert their full effort to achieve academic success, as the efforts and motivation they invest are forms of school engagement (Rodrics & Magre, 2024). Students better equipped to overcome difficulties and challenges

tend to be more involved in learning (Putwain & Wood, 2023). Therefore, to ensure optimal school engagement, students must first attain a buoyant state (Rohinsa, 2024).

Increased school engagement is facilitated by successful coping strategies, effective planning to overcome academic obstacles, and a proactive approach to addressing challenges. Training programs focusing on these skills can enhance students' enthusiasm for engagement. When emphasized during training, factors such as successful coping and a general tendency toward adaptive behaviors can foster academic buoyancy. This assertion, in turn, leads to a deeper understanding of academic concepts and energizes students to confront their academic challenges (Fooladi et al., 2023). After students undergo training in Academic Buoyancy and develop the ability to demonstrate it, they gain significant experience in school and acquire the capacity to navigate obstacles effectively. This finding aligns with previous research conducted by Martin and Marsh (2008), which indicated that Academic Buoyancy enhances students' enjoyment of the learning process, increases their class participation, and boosts their self-esteem at school. Student participation and self-esteem are manifestations of School Engagement (Fredricks et al., 2004). The Academic Buoyancy that students learn through training leads to higher participation and intent among high school students (Martin, 2014), fostering greater engagement (Smith, 2020).

In this study, an academic buoyancy training intervention was implemented for grade XI students to encourage adaptive behaviors when facing daily challenges at school. The intervention focused on developing students' problem-solving skills by fostering effective coping strategies to navigate everyday difficulties. These findings align with previous research indicating that students possess the capacity to manage problems, setbacks, and daily academic challenges—referred to as academic buoyancy—when they can solve problems effectively (Datu & Yuen, 2018). When students actively work to overcome daily obstacles at school, they exhibit greater engagement and demonstrate a commitment to their educational experience.

The results of this study indicate an increase in school engagement within the cognitive domain (cognitive engagement). When students possess academic buoyancy, they develop the ability to create strategies for solving everyday problems in school. These findings align with the research conducted by Collie et al. (2017), which suggests that academic buoyancy fosters effective learning strategies, such as memorization and elaboration. Students who exhibit academic buoyancy employ cognitive, emotional, and behavioral regulation strategies (Putwain & Wood, 2023). Memorization and elaboration indicate school engagement in the cognitive domain (Fredricks et al., 2004). The outcomes of this engagement include emotional involvement, enjoyment of school, positive feelings, intentions, and active class participation (Datu et al., 2016; Martin, 2013).

Furthermore, this study found an increase in School Engagement, particularly in Emotional Engagement. The ability of students to develop effective coping strategies for problem-solving and to apply these strategies in overcoming daily academic challenges—referred to as Successful Coping—fosters positive emotions during school activities. These emotions serve as indicators of deep Emotional Engagement and overall School Engagement. Successfully addressing academic challenges energizes students, encouraging them to demonstrate effort, perseverance, initiative, and focus during learning activities. These activities include enjoying classroom experiences, enthusiasm, and interest in academic tasks (Rohinsa, 2024). Academic buoyancy refers to maintaining engagement, particularly emotional engagement, which encompasses school enjoyment, positive feelings, intentions, and class participation (Datu & Yang, 2016; Martin, 2013). Success in addressing daily problems at school enhances students' self-esteem and fosters greater involvement in classroom learning activities (Martin & Marsh, 2008; Miller et al., 2013). Consequently, students' ability to devise solutions to overcome obstacles encountered in school can significantly enhance their overall school engagement.

In addition, students' success in developing coping strategies to overcome daily academic

 ISSN 2715-2456

challenges fosters their flexibility in problem-solving, a strong work ethic, and a positive approach to obstacles encountered in school. This growth is because they are trained to think critically and strive to devise effective solutions. During this training, students are given opportunities to practice problem-solving by seeking support from others. When students successfully create coping strategies to address the challenges they face at school, they also develop the ability to identify daily hardships, understand the stages of the problem-solving process, prioritize issues, recognize different types of problems, transform challenges into opportunities, seek assistance from appropriate sources such as teachers and peers, and independently develop problem-solving strategies. According to previous research by Fredricks et al. (2004), strategies, understanding learning, and efforts to seek help (e.g., from teachers and friends) are indicators of cognitive engagement in school. Therefore, students who excel in forming solutions to overcome daily challenges (successful coping strategies) are likely to be more cognitively engaged. When students possess academic buoyancy, they demonstrate an adaptive attitude by actively attempting to resolve their problems or challenges to overcome daily hardships at school (Martin, 2013).

The findings of this study indicate that there is no increase in behavioral engagement. This lack of improvement may be attributed to academic buoyancy training not directly influencing student engagement behaviors, such as attendance and participation in class. Additionally, the enhancement of school engagement typically occurs gradually and can vary from individual to individual. This process often requires time and effort, with outcomes that differ based on various factors affecting each person (Zepke & Leach, 2010).

Nevertheless, academic buoyancy training can indirectly influence student school engagement by enhancing emotional and cognitive engagement. Various indicators represent school engagement, including participation in classroom activities, relationships with classmates and teachers, and learning motivation. The increase in school engagement occurs gradually, indicating that even if only one or two dimensions have improved, it still signifies an overall enhancement in student engagement. Referring back to the theoretical framework proposed by Fredricks et al. (2004), which encompasses cognitive, emotional, and behavioral aspects as determinants of school engagement, it becomes evident that improving engagement in one area positively impacts the others. For instance, enhancing cognitive engagement through independent learning can increase emotional engagement as students become more invested in learning. Similarly, fostering social relationships through group work can boost behavioral engagement, as students feel a greater sense of accountability to their peers.

Based on the findings of this study, academic buoyancy training indirectly enhanced the school engagement of XI students at SMA Santa Maria 3 Cimahi by fostering improvements in both emotional and cognitive domains. However, no increase in behavioral engagement was observed during the research period. Although academic buoyancy training may not directly influence behavioral engagement, such as attendance, developing these skills promotes greater motivation, interest, and resilience in facing academic challenges. Ultimately, this contributes to improved actions, feelings, and thoughts representing overall school engagement.

Several shortcomings have been identified based on the research conducted, particularly concerning the selection of research samples. The sample in this study consists solely of grade XI students and does not include participants from other grade levels. This limitation affects the generalizability of the research findings to the broader population of high school students, as there are multiple grade levels within high school. Another significant drawback of this study is the lack of exploration into additional data that may influence school engagement. While training in academic buoyancy has been proven to impact school engagement positively, it remains unclear whether other factors also contribute to enhancing school engagement during academic buoyancy training.

Conclusion

The provision of academic buoyancy training interventions has been shown to positively impact the level of school engagement among high school students, demonstrating a moderate effect on their overall engagement. Academic buoyancy equips students with the skills necessary to overcome academic challenges, enabling them to actively participate in cognitive, emotional, and behavioral aspects that characterize school engagement during these difficult times. Although academic buoyancy may not directly influence behavioral engagement—such as attendance—due to the need for gradual improvement, developing academic buoyancy skills fosters cognitive and emotional enhancement. These enhancements include increased motivation, interest, and resilience in facing academic challenges, ultimately contributing to improved actions, feelings, and thoughts reflecting students' school engagement. Furthermore, academic buoyancy leads to higher participation and intent among high school students, thereby facilitating greater engagement. The findings of this study can serve as a valuable reference for schools seeking to implement training programs focused on academic buoyancy skills to enhance student participation and overall school engagement.

References

Brigitha, V., & Rohinsa, M. (2023). The role of academic buoyancy towards engagement in distance learning activities in higher education. *Humanitas (Journal of Psychology), 7*(1), 1–10. https://doi.org/10.28932/humanitas.v7i1.6206

Chahardeh, E. S. (2020). Effectiveness of academic buoyancy training on academic engagement and adjustment to school in firth high school students. *Iranian Journal of Educational Sociology*, *3*(2), 11-19. https://doi.org/10.52547/ijes.3.2.11

Cheung, A. H., Zuckerbrot, R. A., Jensen, P. S., Laraque, D., & Stein, R. E. K. (2018). Guidelines for adolescent depression in primary care (GLAD-PC): Part II. Treatment and ongoing management. *Pediatrics, 141*(3). https://doi.org/10.1542/peds.2017-4082

Collie, R. J., Martin, A. J., & Frydenberg, E. (2017). Social and emotional learning: A brief overview and issues relevant to Australia and the Asia-Pacific. In E. Frydenberg, A. J. Martin, & R. J. Collie (Eds.), *Social and emotional learning in Australia and the Asia-Pacific: Perspectives, programs and approaches* (pp. 1–13). Springer Science + Business Media. https://doi.org/10.1007/978-981-10-3394-0_1

Corder, G. W., & Foreman, D. I. (2014). *Nonparametric statistics for non-statisticians: A step-by-step approach*. Hoboken, NJ: Wiley.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles, CA: SAGE Publications.

Dahal, N., Manandhar, N. K., Luitel, L., Luitel, B. C., Pant, B. P., & Shrestha, I. M. (2022). ICT tools for remote teaching and learning mathematics: A proposal for autonomy and engagements. *Adv Mobile Learn Educ Res, 2*(1), 289-296. https://doi.org/10.25082/AMLER.2022.01.013

Datu, J. A. D., Patricia, J., & Valdez, M. (2016). Psychological capital predicts academic engagement and well-being in filipino high school students. *The Asia-Pacific Education Researcher, 25*(3), 399–405. https://doi.org/10.1007/s40299-015-0254-1

Datu, J. A. D., & Yuen, M. (2018). Predictors and consequences of academic buoyancy: A review of literature with implications for educational psychological research and practice. *Contemporary School Psychology, 22*(3), 207–212. https://doi.org/10.1007/s40688-018-0185-y

Dixson, M. D. (2015). Measuring student engagement in the online course: The online student engagement scale (OSE). *Online Learning*,*a*(4), 561-567. https://doi.org/10.24059/olj.v19i4.561

Fooladi, A., Sadeghinia, A., & Arabsalari, Z. (2023). The effectiveness of academic buoyancy training on emotional, social, and educational adaptation in geography students at the

Martyrs of Mecca Campus of Farhangian University. *International Journal of Education and Cognitive Sciences*, *4*(3), 36-44. https://doi.org/10.61838/kman.ijecs.4.3.4.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement potential of the concept. *Review of Educational Research, 74*(1), 59–109. https://journals.sagepub.com/doi/10.3102/00346543074001059

Fredricks, J. A., Reschly, A. L., & Christenson, S. L. (2019). Handbook of student engagement interventions: Working with disengaged students. In J. A. Fredricks, A. L. Reschly, & S. L. Christenson (Eds.), *Handbook of student engagement interventions: Working with disengaged students* (pp.1-410). John Wiley & Sons. https://doi.org/10.1016/C2016-0-04519-9

Granziera, H, Liem, G, Chong, W, Martin, A, Collie, R, Bishop, M, Tynan, L (2022). 'The role of teachers' instrumental and emotional support in students' academic buoyancy, engagement, and academic skills: A study of high school and elementary school students in different national contexts'. *Learning and Instruction, 80*, https://doi.org/10.1016/j.learninstruc.2022.101619.

Hiver, P., Al-Hoorie, A., & Mercer, S. (2021). *Student engagement in the language classroom*. Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781788923613

Jang, H., Kim, E. J., & Reeve, J. (2016). Why students become more engaged or more disengaged during the semester: A self-determination theory dual-process model. *Learning and Instruction, 43*, 27–38. https://doi.org/10.1016/j.learninstruc.2016.01.002

Jian, Z. (2022). Sustainable engagement and academic achievement under impact of academic self-efficacy through mediation of learning agility: Evidence from music education students. *Frontiers in Psychology*, 13(June), 1–14. https://doi.org/10.3389/fpsyg.2022.899706

Mafaza, N., Kawuryan, F., & Pramono, R. B. (2021). Kebahagiaan mahasiswa ditinjau dari optimisme dan student engagement. *Jurnal Psikologi Perseptual, 6*(2), 148-159. https://doi.org/10.24176/perseptual.v6i2.6877

Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring "everyday" and "classic" resilience in the face of academic adversity. *School Psychology International, 34*(5), 488–500. https://doi.org/10.1177/0143034312472759

Martin, A. J. (2014). Academic buoyancy and academic outcomes: Towards a further understanding of students with attention-deficit/hyperactivity disorder (ADHD), students without ADHD, and academic buoyancy itself. *The British Journal of Educational Psychology, 84*(Pt 1), 86–107. https://doi.org/10.1111/bjep.12007

Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology, 46*(1), 53–83. https://doi.org/10.1016/j.jsp.2007.01.002

Miller, J. B., Risser, M. D. & Griffiths, R. P. (2013). Student choice, instructor flexibility: Moving beyond the blended instructional model. *Issues and Trends in Learning Technologies, 1*(1 https://doi.org/10.2458/azu_itet_v1i1_16464).

Molsberry, F. (2021). Reducing daily hassles in the classroom: Teaching coping techniques to elementary school children [Doctoral dissertation, Utah State University].

Nurhidayatullah, R., Supraptiningsih, E., & Hamdan, S. R. (2019). Studi deskriptif mengenai school engagement pada murid boarding school SMA X Bandung. *Prosiding Psikologi, 5*(1). http://dx.doi.org/10.29313/.v0i0.14224

Oktavia, R., & Yusuf, U. (2018). Studi deskriptif mengenai school engagement pada siswa Kelas XII IPS 3 SMA Negeri "X" Bandung. *Prosiding Psikologi, 1*(2), 274–279. https://doi.org/2460-6448

Putwain, D. W., & Wood, P. (2023). Riding the bumps in mathematics learning: Relations between academic buoyancy, engagement, and achievement. *Learning and Instruction,*

83, 101691. https://doi.org/10.1016/j.learninstruc.2022.101691

Qonita, I., Dahlan, T., & Damaianti, L. (2021). Stres akademik sebagai mediator kontribusi konsep diri akademik terhadap keterlibatan mahasiswa dalam perkuliahan daring. *Persona: Jurnal Psikologi Indonesia, 10*, 119–132. https://doi.org/10.30996/persona.v10i1.4531

Rodrics, R., & Magre, S. (2024). Role of academic buoyancy in enhancing student engagement of secondary school students. *Sanshodhan Chetana, 7(2), 110-122.* https://doi.org/10.13140/RG.2.2.15518.10564

Rohinsa, M., Cahyadi, S., Djunaidi, A., & Iskandar. (2019). Peran teacher support terhadap engagement siswa melalui pemenuhan kebutuhan psikologis dasar. *Jurnal Psikologi 15*(2), 121-129. http://doi.org/10.24014/ jp.v14i2.7423

Rohinsa, M., Cahyadi, S., Djunaidi, A., & Iskandar, T. B. (2020). Effect of parent support on engagement through need satisfaction and academic buoyancy. Utopia Y Praxis Latinoamericana *25*(6), 144-153. https://doi.org/10.5281/zenodo.3987593

Rohinsa, M. (2024). *Daya apung akademik*. Yogyakarta: Zahir Publishing.

Sa'adah, U., & Ariati, J. (2020). Hubungan antara student engagement (keterlibatan siswa) dengan prestasi akademik Mata Pelajaran Matematika pada Siswa Kelas XI SMA Negeri 9 Semarang. *Jurnal Empati, 7*(1), 69-75. https://doi.org/10.14710/empati.2018.20148

Savitri, J., Sussanto, S., & Anggrainy, D. (2016). Basic need satisfaction terhadap school engagement siswa SMP "X" di Bandung. Dalam *Kontribusi Psikologi Dalam Meningkatkan Quality of Life Di Era Masyarakat Ekonomi ASEAN* (Prosiding Forum Ilmiah Psikologi Indonesia) (hal. 19-30). Jakarta: Universitas Taruma Negara.

Shirkavand, N., Fooladi, A., Arabsalari, Z., & Ashoori, J. (2023). The effect of academic buoyancy education on academic self-concept and engagement in ninth grade male students. *International Journal of Education and Cognitive Sciences*, *4*(1), 12-20. https://doi.org/10.61838/kman.ijecs.4.1.2

Smith, M. (2020). *Becoming buoyant: Helping teachers and students cope with the day to day*. London: Routledge.

Steinberg, L. (2017). Adolescent brain science and juvenile justice policymaking. *Psychology, Public Policy, and Law, 23*(4), 410–420. https://doi.org/10.1037/law0000128

Tarbetsky, A. L., Collie, R. J., & Martin, A. J. (2016). The role of implicit theories of intelligence and ability in predicting achievement for Indigenous (Aboriginal) Australian students. *Contemporary Educational Psychology, 47,* 61–71. https://doi.org/https://doi.org/10.1016/j.cedpsych.2016.01.002berkarakter.

Turner, D. P. (2020). Sampling methods in research design. *The Journal of Head and Face Pain, 60* (1), 8-12.

Wullur, B. G. (2021). Multidimensional task engagement and second language lexical learning (*Doctoral dissertation*). Curtin University.

Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education, 11*(3), 167–177. https://doi.org/10.1177/1469787410379680