

Effect of Training Program to Improve Academic Buoyancy Among a Sample of Ninth Grade Students with Low Academic Achievement

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Abstract

This study aims to investigate the effect of a training program on improving academic buoyancy among a sample of ninth grade students with low academic achievement. The sample consisted of 24 male students who were randomly divided into two groups; the experimental group participated in the training program and the academic buoyancy questionnaire, while the control group did not participate in the training program. The results showed statistically significant levels of academic buoyancy between experimental and control groups, in favor of the experimental group. The effect size value for academic buoyancy was 31%. The results of this show that there is an effectiveness of the training program to improve the level of academic buoyancy among ninth grade students who have low academic achievement.

Keywords: training program, academic buoyancy, ninth grade, low academic achievement

1. Introduction

One of the most positive aids for students battling the challenges and adversities of student, life is learning how to achieve academic buoyancy by being proactive when dealing with adversity. Academic buoyancy is frequently considered a component of a student's healthy mental state, able to cope with difficulties both academic and personal (Martin & Marsh, 2008; Smith, 2020). The ability to complete tasks naturally without stress improves self-confidence and esteem (Akbari & Rahimi, 2016).

A student's aptitude in coping positively with the setbacks and anxiety of student life has become known as 'academic buoyancy' – the term was created by Martin and Marsh (2006) to define the successful combination of improved self-efficacy, commitment and control, and expanded their research and definition in Martin and Marsh (2009) to include enjoyment in learning and school in general, as well as improved self-confidence and effectiveness. Unfortunately, many students' experiences at school are miserable, dominated by seemingly insurmountable challenges and subsequent failures (Martin et al., 2010; Polsberry, 2021).

Martin and Marsh (2008, 2009) proposed targeted help and encouragement aligned with challenging schoolwork, as significant factors activating buoyancy. Following his review of available literature, Barnett (2012) concluded that the concept of academic buoyancy resulted from resilience studies relating to psychologically susceptible children who, in spite of overwhelming disabilities, triumphed over their problems and were educationally successful (Martin & Marsh, 2008)

Academic buoyancy can be defined as being able to not only survive, but react positively when faced by the various problems and obstacles inherent in the daily school routine of homework targets, examination stress, fear of failure and low grades (Martin & Marsh, 2008). Academic resilience however, entails a student's ability to maintain academic standards, notwithstanding severe adversity (Martin & Marsh, 2009). While academic resilience is applicable to a minority, in the face of a prolonged period of poor grades or illness, academic buoyancy is applicable to the majority of students since the majority are affected by everyday academic challenges such as a single low grade (Brigitha & Rohinsa, 2023; Martin & Marsh, 2009).

Buoyancy, therefore, is more strongly linked to the lower-levels of negativity including academic performance anxiety and fear of failure, while resilience copes with extreme situations like maintaining high grades despite changing school mid-term (Martin, 2013). Academic buoyancy is the achievement of a range of adaptations resulting in positive educational outcomes: taking pleasure and satisfaction from participating in class, planning, academic self-efficacy, and low test-anxiety (Martin, 2013; Martin et al., 2010; Martin & Marsh, 2008; Putwain et al., 2012; Putwain & Daly, 2013; Rohinsa et al., 2020).

Motivation or incentive are terms that describe inducement or stimulation to encourage people into action, maintain impetus, and complete the task (Pintrich, 2003; Pintrich & Schunk, 2002). Simply, inspirations respond to and resound with essence and elements. Academic buoyancy can be explained as the student's capability, energy, and perseverance when battling academic difficulties and obstructions. Following this logic, from a definitive point of view we may then conjecture that motivation is a predictor of academic buoyancy. However, it is also worth bearing in mind the range of constituents generally considered foremost in motivation concepts, as well as the conjectured results. A consolidated assessment of motivation and classroom learning (Pintrich, 2003) proposed that motivation supported the following four overall results: choice of action and the reason for this action to be chosen rather than another; activity level and degree to which an individual initiates the activity; the individual's determination, perseverance, and demonstration of ability. Therefore, concerning academic buoyancy and motivation, the hypothesis would be prediction of how students chose to respond to academic hardship, to what extent they chose to respond to the academic problems, the degree to which they react to the adversity, and the extent of their determination and perseverance.

The conjectured benefits of academic buoyancy may also yield the beneficial option of self-regulation (Boekarest&Corno, 2005). Self-regulated learners choose an appropriate learning strategy to accomplish a desired objective such as working through problems and setbacks in their academic endeavors. Students who are self-regulated frequently adjust their task appraisals and expectations of success, thereby remaining involved in their academic endeavors and possibly in a better position to address academic problems as they arise. In addition, they characteristically return to past accomplishments - feedback information for potential adjustments in present work, and assistance with contemporary challenges (Boekaerts & Corno, 2005; Kuhl, 2000).

Results of previous studies showed a positive relationship between academic buoyancy and academic achievement, goals orientation, emotional stability, and academic ambition, while showing a negative relationship between academic buoyancy and fear of failure, neuroticism, stress, severe lack of confidence, academic anxiety, and test anxiety (Martin, 2007; Martin et al., 2012; Putwain et al., 2012) while Martin and Marsh (2006) showed academic buoyancy to be a predictor of positive academic engagement as well as non-academic results, as for instance, that academic buoyancy was a significant predictor that the individual would enjoy school, be an energetic participant both in class and other school activities, and was generally highly self-confident. However, in a later study, Martin and Marsh (2008) found that academic buoyancy was not always a predictor of positive outcomes as in determination to complete tasks, but also of negative outcomes such as absenteeism.

Ninth grade students in adolescence face many psychological difficulties, stress, anxiety and many goals that they seek to achieve. Academic buoyancy is one of the positive concepts that have emerged in the field of psychological educational studies, which indicates the ability of students to respond positively to the daily challenges in academic circles. Academic buoyancy helps students overcome daily educational and academic obstacles and improves their academic achievement. More especially, this study investigates the effect of a training program to improve academic buoyancy among a sample of ninth grade students with low academic achievement.

Study hypothesis: Is there any effect of a training program to improve academic buoyancy among a sample of ninth grade students with low academic achievement.

2. Materials and Method

2.1 Design and Setting

This study used a quasi-experimental approach in which the experimental group participated in the training program, while the control group did not receive any treatment.

2.2 Participants and Sampling

24 male students with low academic achievement were randomly assigned to experimental and control groups, each consisting of 12 students. All of the study sample had an academic achievement less than 60%. Parents of the students' consent was obtained to participate in this study. Before application the training program, the experimental and control groups completed the academic buoyancy, then the independent sample t-test was used to ensure the two group was

equal in the level of academic buoyancy, and all t value were not statistically significant.

2.3 Data Collection Tool and Technique

2.3.1 Training Program

The researcher built the training program after reviewing the theoretical literature and previous studies that dealt with the academic buoyancy concept. The training program consisted of 13 training sessions of 40 minutes, three sessions per week, using the following strategies: positive reinforcement, practical applications, narrative activity, cooperative work, discussion, brainstorming, and homework. The content and objectives of the training sessions are shown in Table 1.

Table 1. Title Sessions and Objective

No	Title session	Session goals
1.	Introduction	In this session, the students were introduced to the general and specific objectives of the training program and agreed on the dates of the sessions. The researcher was introduced to the concept of academic buoyancy. The researcher discussed the importance of academic buoyancy and its effects on the educational process, and discussed the strategies that were used to increase academic buoyancy.
2.	Cognitive organization	In this session, students were introduced to the concept of cognitive organization, by introducing the students to the importance of the mental process in the learning process and training them in cognitive strategies such as planning, monitoring, and organization.
3.	Behavioral organization	In this session, the students were introduced to the concept of behavioral organization, such as time management and organizational effort devoted to accomplishing an academic task.
4.	Emotional organization	In this session, students were introduced to the concept of emotional organization and its impact on the learning process, and trained to reduce negative emotions such as anxiety and fear associated with the completion of academic tasks.
5.	Anxiety	In this session, students were introduced to the negative effects of anxiety and its impact on the academic performance of students, and identified strategies that students can use to reduce anxiety, such as good preparation for exams and relaxation.
6.	Planning	In this session, students were introduced to the concept of planning and its importance in the learning process, and to train students to develop plans and methods to achieve scientific and practical goals.
7.	Mindfulness	In this session, students were introduced to the concept of mindfulness and trained to pay attention to specific goals. The students' attention was drawn to the internal and external experiences that he is going through at the present moment in order to organize his emotions through training based on thinking and reflection.
8.	Academic hope	In this session, students were introduced to the concept of academic hope, and students were trained to get rid of experiences of failure, correct them, and uncover positive aspects in them.
9.	Will	In this session, students were introduced to the concept of will, and students were trained to overcome and challenge adversity and difficulties that prevent the achievement of their goals.
10.	Self-confidence	In this session, students were introduced to the concept of self-confidence, the positive and negative effects of this concept, and methods to increase students' self-confidence.
11.	Commitment	In this session, students were introduced to the concept of commitment and its importance in facing academic obstacles and difficulties.
12.	Positive thinking	In this session, students were introduced to the concept of positive thinking and its role in motivating students to seek life and overcome obstacles and difficulties facing them.
13.	Closing	In this session, the students' notes were discussed, which students had benefited from the training program, and feedback given. Finally, students completed the academic buoyancy scale.

Academic Buoyancy Questionnaire (ABQ): The ABQ was developed by Martin and Marsh (2008). The ABQ consists of 21 items distributed in five dimensions: self-efficacy (4 items, Cronbach alpha=0.83), uncertain control (4 items, Cronbach alpha=0.86), academic engagement (5 items, Cronbach alpha=0.87), anxiety (4 items, Cronbach

alpha=0.84), and teacher-student relationship (4 items, Cronbach alpha=0.88). The internal consistency of ABQ using Cronbach alpha was 0.82, and using t-retest = 0.67.

In this study the authors checked the internal consistency of the ABQ Arabic version using Cronbach alpha which was 0.78 and 0.77, 0.81, 0.76, 0.72, and 0.77 respectively for self-efficacy, uncertain control, academic engagement, anxiety, and teacher-student relationship.

2.4 Data Collection and Analysis

The quasi-experimental method was used in this study, as the experimental group underwent the training program, whereas the control group was not subject to any program. The Academic Buoyancy Questionnaire was translated from English to Arabic and the accuracy of the Arabic version was verified. Before starting the training program, the study sample students of the experimental and control groups completed the ABQ to verify the equivalence of the two groups; the ABQ was also completed by both the experimental and control groups of the study sample at the end of the training program, to examine the study hypothesis mean, standard deviation, ANCOVA covariance analysis were used.

3. Results

Study hypothesis: Is there any effect of the training program to improve academic buoyancy among a sample of ninth grade students with low academic achievement.

To examine this hypothesis, mean, standard deviation, and academic level for before and after training program in experimental and control groups, as shown in Table 2.

Table 2. Mean and Standard Deviation of Academic Buoyancy in Experimental and Control Groups

Variables	Group	Pre-test		Post-test	
		Mean	SD	Mean	SD
Self-efficacy	Experimental	2.07	0.32	3.67	0.66
	Control	2.01	0.30	1.73	0.38
Uncertain control	Experimental	3.52	0.41	2.15	0.75
	Control	3.50	0.43	3.39	0.93
Academic engagement	Experimental	2.16	0.24	3.14	0.56
	Control	2.10	0.24	1.75	0.30
Anxiety	Experimental	3.94	0.34	2.66	0.37
	Control	3.91	0.34	3.70	0.75
Teacher-student relationship	Experimental	2.24	0.35	3.12	0.90
	Control	2.21	0.40	2.27	0.63
Academic buoyancy	Experimental	2.79	0.16	2.95	0.35
	Control	2.75	0.13	2.57	0.20

The results of ANCOVA shown in table 3 there are statistically significant results in the level of academic buoyancy due to group in favor of the experimental group ($F= 9.516, P= 0.00$), and statistically significant results in the level of academic buoyancy dimensions: self-efficacy, uncertain control, academic engagement, anxiety, and teacher-student relationship, in favor of the experimental group

The effect for academic buoyancy= 31%, for academic buoyancy dimensions= 77%, 36%, 72%, 49%, and 25% respectively for self-efficacy, uncertain control, academic engagement, anxiety, and teacher-student relationship.

Table 3. Results of ANCOVA Covariance Analysis to Determine the Effect of Training Program on Academic Buoyancy in Experimental and Control Groups

Variables	Source	Sum of squares	df	Mean square	F	Sig	Effect size
Self-efficacy	Pre-test	0.140	1	0.140	0.465	0.50	0.02
	Group	22.057	1	22.057	73.409	0.00	0.77
	Error	6.130	21	0.300			
	Corrected total	29.205	23				
Uncertain control	Pre-test	0.001	1	0.001	0.001	0.97	0.00
	Group	9.203	1	9.203	12.167	0.00	0.36
	Error	15.885	21	0.756			
	Corrected total	25.097	23				
Academic engagement	Pre-test	0.350	1	0.350	1.744	0.20	0.07
	Group	10.853	1	10.853	54.096	0.00	0.72
	Error	4.213	21	0.201			
	Corrected total	16.151	23				
Anxiety	Pre-test	1.049	1	1.049	3.247	0.08	0.13
	Group	6.662	1	6.662	20.616	0.00	0.49
	Error	6.786	21	0.323			
	Corrected total	14.288	23				
Teacher-student relationship	Pre-test	1.578	1	1.578	2.800	0.10	0.11
	Group	4.148	1	4.148	7.358	0.00	0.25
	Error	11.838	21	0.564			
	Corrected total	17.769	23				
Academic buoyancy	Pre-test	0.101	1	0.101	1.226	0.28	0.05
	Group	0.781	1	0.781	9.516	0.00	0.31
	Error	1.724	21	0.082			
	Corrected total	2.695	23				

4. Discussion

This study aimed to investigate the effect of a training program to improve academic buoyancy among a sample of ninth grade students with low academic achievement. Post-test results showed the training program was effective in improving academic buoyancy for students in the experimental group compared to the control group. The researchers attributed this result to the design of the training program, which focused on introducing students to strategies and techniques that help them reduce anxiety, through good preparation for exams, continuous review of study materials, and reducing feelings of fear of failure and not giving in to frustration and academic obstacles; students were also trained to relax and face academic stress and difficulties calmly and positively.

The practices and strategies focusing on cooperation and discussion contributed to benefiting from the experiences of others, and new methods and strategies were learned in facing academic challenges and pressures. The activities and training provided for the students in the experimental group led to an increase in the students' ability to face daily pressures and setbacks and increased their ability to withstand the difficulties and continue their efforts despite the presence of obstacles and the difficulty of the tasks, all of which led to an improvement in the level of academic buoyancy among students in the experimental group and led to the differences between pre-test and post-test results.

We may therefore surmise that certain triggers such as fear intensify the pressure normally felt when preparing for examinations, looming deadlines, and the ever-present dread of failure. Given that students who are naturally more buoyant are confident of their ability to deal positively with the stress incurred in these situations, it is reasonable to expect such students to react to fear triggers as a challenge rather than as the frightening threat perceived by low academic buoyancy students.

The results of this study are similar to the results of previous studies. Mohammed (2020) conducted a study in Egypt

to investigate the effectiveness of a training program based on Montessori activities to develop academic buoyancy among primary students with slow learning. The results showed there was a statistically significant effect of the program on improving academic buoyancy among the experimental group compared with the control group. Al-zaiet (2022) conducted a study in Egypt to investigate the effective of a training program based on self-evaluation skills to develop academic buoyancy among undergraduate students. The results showed there was a statistically significant effect of the program on improving academic buoyancy among the experimental group compared with the control group. Habib and Elnaghi (2024) conducted a study in Egypt to investigate the effectiveness of a training program based on mindfulness techniques to develop academic buoyancy among undergraduate students with low academic achievement. The results showed there was a statistically significant effect of the program on improving academic buoyancy among the experimental group compared with the control group. Abu-Ubaid (2022) conducted a study in Palestine to investigate the effectiveness of a training program based on Meta-cognitive thinking skills to develop academic buoyancy among undergraduate students. The results showed there was a statistically significant effect of the program on improving academic buoyancy among the experimental group compared with the control group. Sayid et al. (2024) conducted a study in Egypt to investigate the effectiveness of a training program based on systemic thinking skills to develop academic buoyancy among middle school students. The results showed there was a statistically significant effect of the program on improving academic buoyancy among the experimental group compared with the control group.

Martin (2014) suggested several strategies to help students cope with the difficulties and tribulations they face during the educational process, to overcome them and move from a state of failure to a state of success. These strategies are also used as predictors of a student's ability to achieve academic buoyancy, such as self-confidence, commitment, planning, perseverance, and control. Carrington (2013) suggested three predictors of students' ability to access academic buoyancy, namely academic self-efficacy, engagement, and achievement of goals.

In clarification of these findings, we reference the role of the following factors considered in academic buoyancy: psychological, school related, participation, family and peer factors (Martin & Marsh, 2008). Psychological factors may include the following: motivation, incentive, self-efficacy, regulation, and academic resilience. Family and peer education: cognitive and emotional support of family and friends and communicative patterns with family and peers; factors of school education and participation can be the structure of the classroom, the quality of time spent in the class, positive attitude toward the class, and participation in improving the classroom atmosphere. Academic buoyancy is one of the key indicators in successful and fruitful learning that proves academic abilities and advancements (Freilich & Shechtman, 2010).

Amer (2018) conducted a study to investigate the effectiveness of a training program based on motivational determinants to improve academic buoyancy among female university students. The results of the study showed statistical significance in the level of academic buoyancy between experimental and control groups in favor of the experimental group that received the training program. Salami et al. (2016) conducted a study to investigate the effect of cooperative learning to increase academic buoyancy. The result of the study showed that the cooperative learning method increased the academic buoyancy of students in the experimental group compared to students in the control group. Pidgeon and Keye (2014) suggested that mindfulness training contributed to improvement in ability to sustain desired academic levels and improved classroom participation, which raised students' psychological quality of life. Puri and Robinson (2007) suggested that positive thinking promoted hope, optimism, pride, and happiness, so highly positive students were less troubled by daily frustrations. Roodbari et al. (2015) suggested that positive thinking training reduced anxiety and increased happiness. Naseem and Khaled (2010) found a positive relationship between positive thinking and hope, optimism, and academic buoyancy. Aldawsari et al. (2025) conducted a study to investigate the effect of training program based on mindfulness to increase academic buoyancy and psychological flow. The result of the study showed that the training program based on mindfulness increased the academic buoyancy of students in the experimental group compared to students in the control group.

Consequently, feedback that can help develop academic buoyancy (Martin & Marsh, 2008) and support the development of self-regulation (Liu & Carless, 2006) would appear to be the foundation of effective practice, enabling students to deal with lower-than-expected grades by encouraging and fostering constructive strategies. Although all students are not of equal academic standard or ability, nor equally successful in dealing with educational obstacles and academic challenges, understanding and practice can achieve buoyancy, by cultivating a positive, constructive, and adaptive response to a variety of challenges and educational barriers, including poor grades, stress levels, and loss of academic motivation.

Buoyancy is an important component of mental well-being, and when able to perform a task spontaneously without

stress, the student feels increased energy and strength which improves both effort and perseverance and ultimately improves academic performance (Fooladi et al., 2016). In line with this, as Thompson's (2004) findings show, if self-handicapping is introduced to self-assertiveness strategies or avoidable failing behaviors, it is used in both cases as protection of self-respect and self-reflection. Adjusting cognitive emotions is also a tool by which to understand control of concentration and activities by adopting strategic actions in overcoming obstacles and solving problems. Failing to regulate emotion can create vulnerability to emotional problems such as depression, anxiety, psychological stress and behavioral and cognitive problems (Ehing et al., 2008).

Ramasubramanian (2017) found a positive relationship between mindfulness, academic buoyancy and coping with stress. Students with a high level of mindfulness are better able to confront irrational thoughts and negative emotions without allowing them to negatively affect their psychological health. Dealing correctly with those experiences and accepting them increases academic buoyancy levels. Mindfulness enriches experiences affecting self-regulation by focusing the students' attention on his goals, developing his ability to harmonies with those goals, improving the related academic self-regulation, controlling his attitude and actions, thus leading to the achievement of these goals (Brown & Ryan, 2003; Howell & Buro, 2011).

The results of this study indicated that the training program improves level of student academic buoyancy and that the teachers can use the strategies employed in the training program within the classroom to enhance students academic buoyancy and improve their academic engagement in the classroom.

5. Conclusion

The results of this confirm that there is an effectiveness of the training program to improve the level of academic buoyancy among ninth-grade students who have low academic achievement. The results of study showed that in there are statistically significant results in the level of academic buoyancy due to group in favor of the experimental group, and statistically significant results in the level of academic buoyancy dimensions: self-efficacy, uncertain control, academic engagement, anxiety, and teacher-student relationship, in favor of the experimental group. The results of this study can be used to use the strategies and techniques in the training program to develop another academic aspect among students with low academic achievement. The current study was limited to a sample of ninth-grade students with low achievement. The researchers recommended further experimental studies using other variables to increase academic buoyancy among university and school students, also to investigate the relationship between academic buoyancy and academic self-efficacy.

There are several limitations of this study. First, this study was limited to as sample of ninth-grade students with low academic achievement level. second, the researchers in this study relied on the self-report method as a tool for collecting data.

References

- Abu-Ubaid, R. (2022). The effectiveness of a training program in the light of meta-cognitive thinking skills on the academic buoyancy among Al-Aqsa University female students in Gaza. *Journal of the College of Education for Girls for Humanities, 16*(31), 441-479.
- Akbari, B. M., & Rahimi, B. H. (2016). Explaining the academic buoyancy and motivation of students based on their perception of the learning environment in Birjand University of Medical Sciences. *Iranian Journal of Medical Education, 16*(27), 222-231.
- Aldawsari, H., Shahat, H., Nemt-Allah, M., Badawy, Ahmed, A., & Badri, H. (2025). Enhancing academic buoyancy and psychological flow in higher education: the effect of mindfulness-based training. *Journal of Educational and Social Research, 15*(2), 52-62.
- Al-Zacit, F. (2022). A training program based on self-evaluation skill to develop academic buoyancy among vocational diploma students in the special education department. *Educational and Social Studies, 28*(1), 197-246
- Amer, I. (2018). Effectiveness of a training program based on motivational determinants to improve academic buoyancy among university female students. *Journal of Educational Sciences, 26*(2), 206-250.
- Barnett, P. A. (2012). *High school students' academic buoyancy: longitudinal changes in motivation, cognitive engagement and affect in English and math dissertation*. Submitted in Partial Fulfillment of the Requirements for the Degree of Philosophy in the Gradure School of Education of Fordham University.
- Boekaerts, M., & Corno, L. (2005). Self-regulation in the classroom: a perspective on assessment and intervention.

- Applied Psychology*, 54, 199-231. <https://doi.org/10.1111/j.1464-0597.2005.00205.x>
- Brigitha, V., & Rohinsa, M. (2023). The role of academic buoyancy towards engagement in distance learning activities in higher education. *Humanities Journal of Psychology*, 7(1), 1-10. <https://doi.org/10.28932/humanitas.v7i1.6206>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848. <https://doi.org/10.1037/0022-3514.84.4.822>.
- Carrington, C. C. (2013). *Psycho-educational factors in the prediction of academic buoyancy in second life*. PH. D. Thesis, Harold Abel School of Social and Behavioral Sciences, Capella University.
- Ehing, T., Fischer, S., Schnulle, J., & Bosterling, A. (2008). Characteristics depressed individuals. *Personality & Individual Differences*, 44, 1574-1584.
- Fooladi, A., Kajbaf, M. B., & Ghomrani, A. (2016). The effectiveness of educational leadership on academic meaning and academic performance of third-grade secondary students in Mashhad. *Journal of Research in Educational and Vocational Learning*, 15(4), 93-103.
- Freilich, R., & Shechtman, Z. (2010). The contribution of art therapy to the social, emotional, and academic Adjustment of children with learning disabilities. *The Arts in Psychotherapy*, 37(4), 97-105. <https://doi.org/10.1016/j.aip.2010.02.003>
- Habib, A., & Elnaghi, H. (2024). The effectiveness of a training program based on mindfulness techniques for improving academic buoyancy and reducing study boredom among a sample of faculty of education students' low academic achievement at Benha University. *Journal of College Education*, 35(140), 187-333.
- Howell, A. J., & Buro, K. (2011). Relations among mindfulness, achievement-related self-regulation, and achievement emotions. *Journal of Happiness Studies*, 12(6), 1007-1022. <https://doi.org/10.1007/s10902-010-9241-7>
- Kuhl, J. (2000). A functional-design approach to motivation and self-regulation. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 111-169). Academic Press.
- Liu, N. F., & Carless, D. (2006). Peer feedback: The learning element of peer assessment. *Teaching in Higher Education*, 11(3), 279-290. <https://doi.org/10.1080/13562510600680582>
- Martin, A. J. (2007). Examining a multidimensional model of student motivation and engagement using a construct validation approach. *British Journal of Educational Psychology*, 77, 413-440. <https://doi.org/10.1348/000709906X118036>.
- Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. *School Psychology International*, 34, 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. *British Journal of Educational Psychology*, 84, 86-107. <https://doi.org/10.1111/bjep.12007>
- Martin, A. J., & Marsh, H. (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>
- Martin, A. J., & Marsh, H. (2009). Academic resilience and academic buoyancy: Multidimensional and hierarchical conceptual of causes. Correlates and cognate constructs. *Oxford review of Education*, 35, 353-370. <https://doi.org/10.1080/03054980902934639>
- Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlate: a construct validity approach. *Psychology in the school*, 43, 267-282. <https://doi.org/10.1002/pits.20149>
- Martin, A. J., Colmar, S. H., Davey, L. A., & Marsh, H. W. (2010). Longitudinal modeling of academic buoyancy and motivation: Do the '5Cs' hold up over time? *British Journal of Educational Psychology*, 80, 473-496.
- Martin, A. J., Nejad, H., Colmar, S., & Liem, G. A. D. (2012). Adaptability: Conceptual and empirical perspectives on responses to change, novelty and uncertainty. *Australian Journal of Guidance and Counseling*, 22, 58-81. <https://doi.org/10.1017/jgc.2012.8>
- Mohammed, Z. (2020). The effectiveness of a program based on Montessori activities of develop academic buoyancy and reduce mental wandering among the slow learning primary school students. *Journal of College Education*, 31(122), 1-62.

- Molsberry, F. (2021). *Reducing daily hassles in the classroom: Teaching coping techniques to elementary school children*. Doctoral dissertation, Utah State University.
- Naseem, Z., & Khaled, R. (2010). Positive Thinking in coping with stress and health outcomes: literature review. *Journal of research and reflections in education*, 4(1), 42-61.
- Pidgeon, A. M., & Keye, M. (2014). Relationship between resilience, mindfulness, and psychological well-being in university students. *International Journal of Liberal Arts and Social Science*, 2(5), 27-32.
- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667-686. <https://doi.org/10.1037/0022-0663.95.4.667>
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Puri, M., & Robinson, D. (2007). Optimism and Economic Choice. *Journal of Financial Economics*, 86, 71-99. <https://doi.org/10.1016/j.jfineco.2006.09.003>
- Putwain, D. W., & Daly, A. L. (2013). Do clusters of test anxiety and academic buoyancy differentially predict academic performance? *Learning and Individual Differences*, 27, 157-162. <https://doi.org/10.1016/j.lindif.2013.07.010>
- Putwain, D. W., Connors, L., Symes, W., & Douglas-Osbron, E. (2012). Is academic buoyancy anything more than adaptive coping? *Anxiety, Stress & Coping*, 25(3), 349-358. <https://doi.org/10.1080/10615806.2011.582459>
- Ramasubramanian, S. (2017). Mindfulness, stress coping and everyday resilience among emerging youth in a university setting: a mixed methods approach. *International Journal of adolescence and youth*, 22(3), 308-321. <https://doi.org/10.1080/02673843.2016.1175361>
- 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>
- Roodbari, O., Zare, H., Saeedi, H., Divsalar, K., & Eslamian, F. (2015). The effectiveness of positive thinking training on perceived stress and happiness in patients with thalassemia major. *Report of Health Care*, 3(1), 88-91.
- Salami, O., Asadzadeh, H., Ghotbian, N., Nazemi-Moghadam, M., & Azizi, Z. (2016). Effectiveness of cooperative learning method on academic buoyancy of male students of second period elementary school in the city of Shahriar. *International Journal of Humanities and Cultural Studies*, 3(4), 833-841.
- Sayid, Z., Hassan, M., & Ameen, Z. (2024). The effectiveness of a program based on some systemic thinking skills in improving academic buoyancy among preparatory school students. *Arab journal of Measurement and Evaluation*, 5(9), 1-57.
- Smith, M. (2020). *Becoming buoyant: Helping teachers and students cope with the day to day*. London: Routledge.
- Thompson, T. (2004). Failure-avoidance: Parenting, the achievement environment of the home and strategies for reduction. *Learning and Instruction*, 14, 3-26. <https://doi.org/10.1016/j.learninstruc.2003.10.005>

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Authors contributions

Sample: Dr. AM were responsible for study design and revising. Dr. AG was responsible for data collection. All authors read and approved the final manuscript.

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