Research Article

The Effect of Psycho-Education Program on the Academic Buoyancy of Adolescent Learners from an International School in Bangkok, Thailand

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ABSTRACT

Thailand as a prospering country hoped to retain the quality of education for its students. However, despite efforts to accomplish this intention, a number of students are still struggling to retain their engagement in school due to their declining academic buoyancy. With this reality, efforts are undertaken inside the classroom to address this pressing concern. While classroom-based interventions are known to deliver desirable results, a scarcity in psycho-education programs remains unexplored. Hence, the initiation of this quasi-experimental nonequivalent pretest and posttest control group study to develop an initial evidence for their usefulness in the academe. Results taken from the participants confirmed the viability of a psycho-education program for academic buoyancy, particularly among high school students. Moreover, as reflected in their daily journals, presence of academic climate and commitment are best reflective of their academic buoyancy experiences. Conversely, unfavourable academic climate, loss of clarity, commitment challenges, and declining confidence induces their experiences of lowering academic buoyancy. Recommendations included continuance of psycho-education programs not only for the students, but also for the teachers who are the first-line of defense in carrying out this noble endeavor of bringing students to their academic success.

Keywords: Academic buoyancy; Psycho-education program; Coordination; Clarity; Composure, Academic climate; Confidence; Commitment; Self-control

INTRODUCTION

Thailand is a prospering country in the Southeast Asian region following current records of economic growth, improving literacy rates, poverty reduction, and progressive health care capabilities [1]. As the second-largest economy following Indonesia and the fourth richest country after Singapore, Brunei, and Malaysia, Thailand is projected to hold a key position in the ASEAN business circles and likewise, among academic communities [2,3]. Unfortunately, this set ideal appeared incoherent with the realistic circumstances of the educational system as evidences of dropout rates due to declining academic buoyancy, underdeveloped English language skills proficiency, achievement gaps between rural and urban students, and low placement in the OECD's Program for International Student Assessment (PISA) persistently haunt the country's local school communities [4-6].

Account of Thailand's dropout rates in 2014 raise concerns regarding the plight of students in the academic sphere. Accordingly, there were 1,760 dropouts in primary education, 4,290 in lower secondary, and 2,764 in upper secondary education. While these figures appear relatively small if the student population is considered, still, the fact remains that dropouts are existing, and these numbers imply lost opportunities for a better future [6]. One of the reasons discovered why Thai students drop from school aside from poverty and family conflicts is due to their inability to cope against the academic challenges they encounter daily. Simply stated, they struggle to sustain engagement, motivation, and performance during the teaching-learning process because of their declined academic buoyancy. Because of this, they are shamed and become vulnerable to peer and academic pressures [6].

Learners with low academic buoyancy become undesirable to most teachers and fellow students as well because of underachievement [7]. Often, they turn as subjects of mockery and jeer because of their lost efficacy to complete assigned tasks in school without help from peers or their immediate family members. Because of these struggles, these learners are most vulnerable to leave and drop from school [8].

Success in education is often equated with an individual's ability to cope against the challenges she/he regularly encountered in the academic realm. This ability is commonly referred as "academic buoyancy" [9]. It may appear similar to the concept of "academic resilience" but according to Martin, et al. [10], there is a thin line separating these two concepts. Whereas academic resilience covers the major challenges one encounter in school, academic buoyancy is more focused on the common and regular setbacks encountered each day. As such, academic buoyancy is often perceived as necessary for learners who are constantly struggling to remain in school [8].

Considered as a positive comportment, academic buoyancy leads to a plethora of desirable effects when developed. These effects include school achievement [9-13], self-management, grit, academic motivation and school engagement [14-16]. While it is true that academic buoyancy yields positive outcomes, building up this capability takes into consideration a few factors namely, self-efficacy and control [17,18]. Conversely, academic buoyancy is also implausible for advancement if an individual is afflicted by anxiety, emotional instability, lack of parental support, and unfounded fear for failure [19-21]. Between Asian and Western students, Asian students are prone to develop higher academic buoyancy, engagement, and motivation [10]. In Thailand, researchers confirmed that 98.9% Thai samples affirmed strong external support, internal strength, and personal skills [22].

Understanding academic buoyancy is best reflected in person-focused approaches because it shows the distinction of how it transpires to a specific group of learners. In other words, academic buoyancy is positioned with a group to determine who and who does not handle the usual and common adversities encountered in the ordinary course of academic life. Furthermore, a person-focused approach captures the experience of academic buoyancy together with its alignment to typical setbacks. In other words, it elucidates what could possibly be the efficient and useful enabling and protective factors the individual possess at the time the difficulty takes place and how these enabling and protective factors make her/him buoyant [10].

If one reads through available studies made in different countries in Southeast Asia, it will be noticed that attention of intervention for less buoyant learners is directed towards the teaching-learning processes and scarce on psycho-education programs [23,24]. More so, these interventions were focused among elementary students [25-27] and none among adolescents or secondary level students.

According to Wittayasin [25], the challenges and pressure of Thai learners exist beyond the classroom settings. Therefore, intervention plans set for them should move beyond the classroom learning and consider other aspects of their academic experiences. While empowering them to effectively learn in class is important, equally necessary is the development of their behavioral prowess to endure the intricacies of regular setbacks in their school environment. As such, conceptualizing a psycho-education intervention program directed in building up the academic buoyancy of adolescent students and testing its efficiency and effectivity is a prudent study to embark on.

Along this line of thought, it is proposed then that a psycho-education program aiming to increase individual student's level of academic buoyancy is conceivable and can be tested quantitatively through the following hypotheses: a) there is no significant difference in the academic buoyancy level of the intervention group after considering their pre and posttest scores. b) There is no significant difference in the academic buoyancy level of the control group after considering their pre and posttest scores. c) There is no significant difference in the academic buoyancy level of the intervention and control groups after considering their pre-test scores. d) There is no significant difference in the academic buoyancy level of the intervention and control groups after considering their posttest scores.

MATERIALS AND METHODS

Participants

Thailand is an emerging country in the Southeast Asia region with economic and educational potentialities. Bangkok as the capital city of this country is home to a number of international schools governed by private corporations or religious organizations. Due to the economic profile of learners enrolled in international schools, acquiring permission to involve their students in research undertakings require stringent protocol on confidentiality. Hence, the researcher as a tenured faculty of an international school opted to carry out the implementation of this research project in his school since it is easier to elicit participation and approval from parents who are familiar to the requesting party. Student participants are adolescents aged 14 to 17 years old. Most of them are female students (75%), Thais (62.5%), and hold Hindu beliefs (62.5%). All of them are graduates of international schools in their elementary and most are children of businessmen/business women (87.5%).

Sample selection

The researcher employed purposive sampling in the selection of samples. According to Creswell, et al. [28], purposive sampling is ideal for studies requiring selection of participants based on given criteria. With this insight, the participants of the study were selected based on these set criteria, namely, a) Adolescent students who scored low or very low in their academic buoyancy assessment using a psychometrically-validated instrument; b) Officially enrolled at the international school; and c) Parents/guardians are willing to sign the informed consent.

Measurement

Academic buoyancy questionnaire for pretest and posttest questionnaire was adapted from the published work of Martin, et al. [10], which was developed to determine students' level of

academic buoyancy. It was administed to the participants before and after their exposure to the intervention program in Google form for easy access. This scale had undergone psychometric validation in 2020 through the research endeavors of Panjwani and Aqil [29]. According to the results of their validity and reliability testing, this scale has seven dimensions, namely, coordination, clarity, composure, academic climate, confidence, commitment, and self-control. Convergent validity of the scale confirmed high validity with measures confirming high correlations between coordination and the other six dimensions (r=646), clarity with the other six (r=665), composure (r=672), academic climate (r=572), confidence (r=572), commitment (r=487), and self-control (r=504). Reliability measure, on the other hand, confirmed high reliability with recorded Cronbach's alpha measures at 70 to 89 in determined dimensions [29].

To ensure that this said questionnaire will be reliable and valid for this study, the researcher endeavored to pilot test using international students from different schools in the Philippines who are of the same chronological age category. Results of the pilot test confirmed the internal consistency reliability of the questionnaire through Chronbach's alpha=924, Convergent validity of the questionnaire confirmed through significant correlations between each sub-category namely, coordination, clarity, composure, academic climate, confidence, commitment, and self-control.

Research design

The general goal of the study was to determine whether the developed psycho-education program can increase the academic buoyancy of the adolescent learners in Bangkok, Thailand. With this mentioned, the researcher utilized a quasi-experimental research design, specifically nonequivalent pretest and posttest control group. According to Creswell, et al. [28], this design is used when intervention and control groups are determined as samples without random assignment. Moreover, each group were subjected to pre and post testing with the intervention group as the sole recipient of the intervention program.

Experimental manipulations or interventions

After securing approval from the appropriate committees granting permission to conduct data gathering, the researcher proceeded to determine the samples of the study following set criteria. Out of n=50 students who answered the questionnaire, n=16 scored low in their academic buoyancy scores. Selection for intervention and control groups' distribution was based on their willingness to attend the program. Of the 16, nine signified

intention to participate and seven opted to decline the offer. However, during the intervention program, one among the nine did not attend; hence, transferred to the control group. All of them took the posttest after the intervention program was completed. The intervention program had 6 learning sessions at 1-hour each session. Participants were asked to write journals to reflect the actual experiences they had during the program. After completing the program and collecting data, analysis and interpretation were conducted to determine results and confirm whether hypotheses are accepted or rejected.

Ethical considerations

The respondents were assured that their participation in the study is voluntary. The details of the data collection procedures were clearly explained to them, and their informed consent was set as a priority. The procedures did not put the respondents at risk. Nevertheless, it was made clear to them that they may withdraw their participation at any point in time. The identities of the respondents are kept as anonymous by using codes in the quantitative and qualitative analysis. Encoded data are kept in password-secured devices and will be destroyed once the study is completed.

Data analysis

Analysis of the data gathered was administered following the cited hypotheses. The testing of hypotheses 1 and 2 used z test and Mann-Whitney for testing hypotheses 3 and 4. These are non-parametric measures used to test significant differences within and between groups with small sample size data

RESULTS

Statistics and data analyses

Pre and post-test of intervention group: As shown in the Table 1 below, there is no significant difference in the pre-test and post-test results of the intervention group (p=208). This group consists of the students with low academic buoyancy who has attended the psycho-education program for academic buoyancy (Table 1).

Pre and post-test of control group: As shown in the Table 2 below, there is no significant difference in the pre-test and post-test results of the control group (p=161). This group consists of the students with low academic buoyancy who did not attend the psycho-education program for academic buoyancy (Table 2).

	Coordination	Clarity	Composure	Acad climate	Confidence	Commitment	Self-control	Acad buoyancy
Z score	-1.429	-1.701	-1.703	-0.714	-0.341	-0.843	-0.06	-1.26
p	0.153	0.089	0.088	0.475	0.733	0.399	0.952	0.208
VI	NS	NS	NS	NS	NS	NS	NS	NS

Table 1: Pre and post-test of intervention group.

Pretest between intervention and control group: As shown in the Table 3 below, significant difference had been noted between the intervention and control groups in coordination (p=017) and clarity (p=004) sub-categories of the academic buoyancy. There was also a significant difference in the academic buoyancy between the intervention and control groups (p=046). It should be noted that between these two groups, the control group had higher academic buoyancy pretest mean scores (M=3.06) than the intervention group (M=2.67).

Accordingly, coordination as a sub-category of academic buoyancy refers to the students' capacity to plan and perform their learning activities while clarity confers the students' sensitivity to her/his goals and targets in learning. Given these understanding of both premises, the control had higher planning, sensitivity, and performing inclination in their academic learning than the intervention group before the initiation and implementation of the psycho-education program (Table 3).

Difference in posttest scores between intervention and control group: As shown in the Table 4 below, there is no significant difference in the pre-test and post-test results of the intervention and control groups in all sub-categories (p=529). This result has two implications. First, before the initiation of the intervention program, the control group had significantly higher academic buoyancy level than the intervention group. But, after the program, the intervention group is no longer significantly different in their academic buoyancy level when compared to the control group. Second, the intervention program had improved the academic buoyancy level of the participants leading them to increase their mean scores, resulting in a not significant difference in the posttest scores (Table 4).

Ancillary analysis

This study conveyed statistical results considering the proposed hypotheses. However, since part of the module included journal writing of their experiences, the researcher opted to include the analyzed data gathered from their written reflections to corroborate the results gained from the statistical analyses. Using Creswell's [28] suggested pattern for analyzing qualitative data, the results taken from the coding mechanism employed are reflected below.

Themes from the journals: There are two themes extracted from the journal transcripts submitted by the participants. These are the positive and negative factors affecting academic buoyancy. Among positive factors are the presence of academic climate and commitment. Conversely, negative factors identified are unfavourable academic climate, loss of clarity, commitment challenged, declining confidence, and lowering of academic buoyancy. The presence of positive academic climate comes from efficacious, helpful, and patient teachers; likewise, the initiation of insightful and informative learning programs. Commitment, on the other hand, originates from the students' persevering attitude, pursuit for growth, and efficacy.

	Coordination	Clarity	Composure	Acad climate	Confidence	Commitment	Self-control	Acad buoyancy
Z	-0.68	-0.073	-0.359	-1.73	-0.828	-1.109	-1.781	-1.400
p	0.497	0.942	0.719	0.084	0.408	0.268	0.075	0.161
VI	NS	NS	NS	NS	NS	NS	NS	NS

Table 2: Pre and post-test of control group.

	Coordination	Clarity	Composure	Acad climate	Confidence	Commitment	Self-control	Acad buoyancy
MWU	22	26	30	25.5	27.5	31	23	26
p	0.29	0.524	0.833	0.489	0.633	0.916	0.339	0.529
VI	NS	NS	NS	NS	NS	NS	NS	NS

Table 3: Difference in pre-test scores between intervention and control groups.

	Coordination	Clarity	Composure	Acad climate	Confidence	Commitment	Self-control	Acad buoyancy
MWU	22	26	30	25.5	27.5	31	23	26
p	0.29	0.524	0.833	0.489	0.633	0.916	0.339	0.529
VI	NS	NS	NS	NS	NS	NS	NS	NS

Table 4: Difference in post-test scores between intervention and control groups.

However, the partiality shown by teachers because of favoritism creates an unfavourable academic climate which hampers the development of academic buoyancy. More so, the experiences of existential crises due to unforeseen events and fear of the future caters loss of clarity. Commitment is also challenged by various academic pressures and temptation to procrastinate in school. Furthermore, the challenging subjects like Math also pose as a threat to deteriorate confidence. As such, necessitates support from the teachers to enhance math efficacy.

Participant flow

During the actual delivery of the psycho-education program, there were n=16 participants who qualified based on the criteria of selection. To ensure commitment to the program, those who signified interest were selected to represent the intervention group and those who declined became to control group. Initially, out of 16 qualified participants, 9 chose to participate in the intervention program and 7 did not. However, among 9 who signified attendance to the program, 1 opted to drop from the program, hence transferred to the control group. This resulted in the equal distribution of the sample size for each group.

Intervention or manipulation fidelity

The prepared module for the intervention program determined the flow of the sessions while they were being executed among the participants. Part of the program, likewise, reflected the attendance of the participants during the program implementation and some of the journals made by the participants.

Predictors of outcome in the intervention program

All participants were considered, considering their fitness to the selection criteria mentioned in the Methods section. Among those who chose to participate in the intervention program, one dropped and was included in the control group. The inclusion of intervention group was based on their voluntary participation so that commitment to the program until the last session will be ensured (Table 5).

		95%CI	
Condition	M(SD)	LL	UL
Intervention completed	3.01(0.677)	2.54	3.43
Control	3.28(0.599)	2.91	3.61

Table 5: Mean and SD of post-test academic buoyancy of intervention and control groups.

DISCUSSION

Following the results gleaned from this study, it can be surmised that hypothesized proposition regarding the effect of a psycho-education program on academic buoyancy among secondary level students is acceptable. With an effect size equivalent to 2=28, the program offers a small effect to the increased academic buoyancy of the students. There are no existing studies to compare this result regarding the viability of psycho-education

program to increase academic buoyancy because studied interventions in the existing literature were directed towards teaching-learning processes. In other words, the interventions found significantly effective to induce academic buoyancy were PEDAGOGICAL and focused on teachers' strategies in teaching specific learning domains [23,24].

With this evidence cited, it can be inferred those results of this study offer initial evidence confirming the practicality of psycho-education intervention programs for academic buoyancy in the secondary level. As such, recommended to explore further the development of this said program both in private and public learning institutions [30-33].

CONCLUSION

Considering the themes extracted from the journal entries of the students, it would be ideal to provide a psycho-education training program for academic buoyancy among teachers. This way, they will be able to create a positive academic climate in the classroom. Moreover, prepare them to facilitate academic learning that will aid in the build-up of clarity, commitment, and confidence among their learners.

While the results conveyed positive impression for the psycho-education program to be implemented, the analysis of this study reflects a number of limitations, which include the small sample size it was able to generate considering the restrictions of sample availability during this time of the pandemic and use of non-parametric measures to analyze data considering this small sample size. As such, recommends the continuance of this program to a larger number of samples, which can be ideally achieved when implemented in government-run schools. Also, to include the role of parental involvement in the build-up of academic buoyancy of students since this part has not been thoroughly explored during the implementation of the study.

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