

Research Paper

Fear of Negative Evaluation and Classroom Participation among University Students: The Mediating Role of Academic Self-Efficacy

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Abstract

The classroom is a part of the learning process at the university that is a crucial one because it has the opportunity to provide space for the students to ask questions, share their ideas, explain their understanding, and discuss in the academic context. But some students might be dissuaded because of the negative connotations of being judged. The students' academic self-efficacy may also signify whether or not they can feel secure enough to engage in classroom activities. The present study investigated the associations between fear of negative evaluation and classroom participation as well as the mediating processes of academic self-efficacy. A quantitative, cross sectional correlational design is suggested with sample of 100 university students of Karachi, Pakistan who were taken by convenience sampling. Standardized assessments for fear of negative evaluation and academic self-efficacy will be administered as well as a classroom participation measure. The proposed relationships will be explored by using the Pearson correlation and Hayes PROCESS Model 4. For this revision, it is not provided any raw data, so it is not fabricated a numerical empirical result. The manuscript offers a full research framework with a well-defined results template to be filled with actual SPSS output.

Keywords: Fear of Negative Evaluation, Classroom Participation, Academic Self-Efficacy, University Students, Higher Education, Mediation

Introduction

University education has become more of a process of the students participating in the learning process, and less about the teacher giving information. This may involve answering questions, asking questions for clarification, joining in on discussions, offering opinions, contributing to group activities, and communicating with instructors. However, students do not engage in the learning at the same level. Studies of college classroom interaction have revealed that students and classroom characteristics interact in determining participation (Fassinger, 1995). A more recent qualitative study also suggests that factors such as the nature of the course content, evaluation concerns, instructor characteristics, and peers all play a role in participation decisions (Cooper et al., 2024). The concern with negative evaluation (FNE) is especially important because when students participate in the classroom, their ideas and performance become visible to the other students and the teacher. A recent study of 566 undergraduates in college science classes revealed that students reported increased worries with FNE about over-thinking answers and decreased engagement, and with whole-class speaking and called upon without preparation, the concerns about the evaluation were particularly high (Cooper et al., 2023). A subsequent study (Cooper et al., 2025) of 494 undergraduates in active-learning biology courses also revealed that FNE had an impact on students' communication in class and resulted in different impacts across student groups. Another factor contributing to participation differences could be academic self-efficacy. Self-efficacy is defined as a person's self-confidence or self-belief in their ability to perform a task successfully (Bandura, 1997). In university environments, academic self-efficacy has been linked to academic achievement and adjustment (Chemers et al., 2001). In recent years, studies in higher education have further explored the relationship between self-efficacy, learning motivation, academic satisfaction, and classroom engagement (Khan et al., 2025). This research thus is interested in one mediating mechanism: fear of negative evaluation is used as the predictor, academic self-efficacy as the mediator, and classroom participation as the outcome. The model is relevant because if a student expects that he or she is going to be judged poorly, he or she may lack confidence in academic environments, which in turn may be linked to a decreased willingness to participate. Participation in class is encouraged in higher education, but in some instances, students do not speak up even with an idea or question that is relevant to the class. Students' fears of negative evaluation might make it psychologically difficult to be active in the classroom and academic self-efficacy could be a factor in students' perceptions of their ability to respond effectively. The constructs have been studied separately in previous research, as has been the study of self-efficacy, FNE, and classroom silence. The academic SE pathway that statistically lies between FNE and classroom participation, however, needs to be explored further, especially in the context of the Pakistani university setting.

Research Gap

There are several recent publications that show how FNE is related to participation in learning activities in the classroom (Cooper et al., 2023, 2025). The impact of academic self-efficacy on classroom engagement and academic outcomes has also been related to academic self-efficacy. Rasheed & Shahid (2023) investigated the relationship between instructional feedback, FNE and academic self-efficacy among 200 students who were studying in university in Pakistan. A recent study that directly tests the proposed model of FNE to academic self-efficacy to classroom participation with a general sample of university students in Karachi, however, is limited. This is a focused gap addressed by this study.

Literature Review

The Fear of Negative Evaluation

The Fear of Negative Evaluation Scale was created to operationalize the construct and a later version was developed, the Brief Fear of Negative Evaluation Scale (Carleton et al., 2006). Of particular interest, FNE can occur in classroom contexts when the student feels that an instructor or a peer will negatively judge his/her answer, language, knowledge or communication. The

construct is strong evidence based on recent evidence for educational relevance. Cooper et al. (2023) showed that FNE was correlated with lower participation and overthinking in college science courses among undergraduates. Cooper et al. (2025) also analyzed classmate and instructor FNE in 494 biology undergraduate students, finding that it influenced students' classroom articulation. Pigart et al. (2024) also examined academic social comparison as another potential intervention to alleviate FNE in large classes of college science students.

Classroom Participation

Classroom participation is a student behaviour aspect of engagement and ranges from verbal contribution to questioning, to responding, to discussion and interaction with peers and/or instructors. Fassinger (1995) showed that classroom interaction is influenced by the student and classroom. The authors of Cooper et al. (2024) discovered that participation decisions are complex and involve student factors, including instructor behaviors, peer behaviors, course characteristics, and the student's own thoughts about how they will be perceived.

Academic Self-Efficacy

Academic self-efficacy is students' confidence in their ability to accomplish academic activities. Bandura (1997) stated that self-efficacy is a factor that influences motivation, persistence, behavior decisions, and reactions to problems. Chemers, et al. (2001) concluded that academic self-efficacy was related to college students' academic performance and adjustment. Self-efficacy is a key element of student motivation and engagement in higher education, and this has been continued to be studied more recently (Khan et al., 2025).

FNE and academic self-efficacy

This study examines the relationship between Academic Self-Efficacy and Students who anticipate a less-than-ideal assessment may have greater doubts about their academic performance in public or evaluative settings. This implies that there is a possible negative correlation between FNE and academic self-efficacy. However, evidence is not always clear-cut. In Pakistan, Rasheed and Shahid (2023) found a positive correlation between FNE and ASE, but the correlation was not significant in the Pakistani university sample that they used. This suggests that the relationship between the two could vary depending on the context and the type of measurement used. This uncertainty lends itself to additional empirical tests. The importance of academic self-efficacy in relation to classroom participation is examined. Academic self-efficacy and classroom participation are explored. Students who have high academic self-efficacy might think that they can cope with classroom participation and be more willing to answer questions or give ideas. On the other hand, if a student is not confident in his/her academic skills, he/she may not participate academically in public. The study of self-efficacy in the models of classroom participation is supported by recent studies on the relationship between self-efficacy, learning motivation and classroom participation (Khan et al., 2025).

FNE and Classroom Participation

The anticipated relationship is negative because students are subject to social assessment when they participate in class. Cooper et al. (2023) reported that undergraduate students indicated that FNE could make them participate less and Cooper et al. (2025) reported that some undergraduate students' ability to articulate their thoughts during classes in active learning was negatively affected by FNE.

Mediating Role of Academic Self-Efficacy

The model proposed suggests that FNE could be related to academic self-efficacy, which in turn could be related to participation. Related constructs have been studied previously. For instance, Yue et al. (2022) identified relationships between self-efficacy, FNE and negative classroom silence amongst undergraduate nursing students with a significant indirect effect via FNE. In the present study, the relationship between FNE and academic self-efficacy is tested with FNE as a predictor, and academic self-efficacy as a mediator.

Theoretical Framework

This study is based on the Social Cognitive Theory by Bandura (1986, 1997), and the self-efficacy theory by Bandura (1997). The framework states that self-confidence in one's ability affects the way students experience challenges and whether they engage in or avoid tasks. Academic behaviors, such as class participation, may be a socially visible behavior. Therefore, anxiety related to negative evaluation could be linked to academic self-beliefs and participation. Conceptual model for the present study is Fear of Negative Evaluation (X) to Academic Self-Efficacy (M) to Classroom Participation (Y). The direct path $X \rightarrow Y$ will also be tested.

Conceptual model: Fear of Negative Evaluation (X) $\rightarrow$ Academic Self-Efficacy (M) $\rightarrow$ Classroom Participation (Y). The direct path $X \rightarrow Y$ will also be tested.

Research Objectives

To investigate the relationship between fear of negative evaluation and academic self-efficacy of university students.

To investigate the relationship between university student academic self-efficacy and involvement in the classroom.

To explore the correlation between fear of negative evaluation and participation of university students in the classroom.

To examine if academic self-efficacy mediates between fear of negative evaluation and classroom participation.

Research Questions

How is the relationship between fear of negative evaluation and academic self-efficacy of university student?

Are there any connections between academic self-efficacy and class participation?

How is fear of negative evaluation related to participation in the classroom?

Is academic self-efficacy as a mediator between fear of negative evaluation and classroom participation?

Method and Material

A quantitative, cross sectional correlational design will be used. The design can be used to explore associations between the three variables of study and to test for an indirect effect statistically. Since the measurements are taken at a single moment of time, the results from the mediation will be understood as statistical indirect associations, not as the proof of the causal sequence. Students from the universities of Karachi, Sindh, Pakistan are the target population. The study will be conducted with 100 subjects. The participants will be recruited using convenience sampling. The eligible participants will be current university students (18 years old or older) who have given informed consent. The Brief Fear of Negative Evaluation Scale—II (Carleton et al., 2006) will be used to measure Fear of Negative Evaluation. The Academic Self-Efficacy Scale developed by Chemers et al. (2001) will be used to determine academic self-efficacy. Classroom participation will be recorded using a validated classroom participation measure from the university which evaluates asking questions, answering questions, discussing, sharing opinions, and being a part of the group discussion. The specific version of the instrument and permissions to use the instrument should be recorded prior to data collection. After obtaining institutional approval and ethical clearance, participants will be handed an informed consent statement. Confidentiality and Opt-in for participation will be observed. The questionnaire can be handed out electronically or in paper format. Personally identifying information should not be collected unless absolutely necessary. Data screening, descriptive data, reliability analysis and Pearson correlation will be used in SPSS. Hayes PROCESS Model 4 with 5,000 bootstrap samples will be used for mediation. If the 95% bootstrap confidence interval for the indirect effect does not contain zero, then the indirect effect will be said to be statistically different from zero.

Results and Discussion

A sample size of $n = 100$ is desired. The numerical results given below should be derived from the real 100 completed questionnaires. In this manuscript no empirical figures are assumed. Participant demographics such as gender, age, academic level, discipline and semester should be reported in Table 1. Means and standard deviations and reliability (r) should be reported in table 2. Pearson correlations should be reported in Table 3. The PROCESS mediation paths and the bootstrapped indirect effect should be reported in Table 4

Table 1. Participant Demographics

Frequencies
Table 1. Participant Demographics (N = 100) — Simulated data

Variable	Category	Frequency	Percent	Valid Percent
Gender	Female	47	47.0	47.0
Gender	Male	53	53.0	53.0
	Total	100	100.0	100.0
Age	18-20	30	30.0	30.0
Age	21-23	42	42.0	42.0
Age	24-26	19	19.0	19.0
Age	27-29	9	9.0	9.0
	Total	100	100.0	100.0
Academic Level	Undergraduate	69	69.0	69.0
Academic Level	Postgraduate	31	31.0	31.0
	Total	100	100.0	100.0
Discipline	Education	37	37.0	37.0
Discipline	Social Sciences	20	20.0	20.0
Discipline	Business	18	18.0	18.0
Discipline	Computer Science	13	13.0	13.0
Discipline	Other	12	12.0	12.0
	Total	100	100.0	100.0
Semester	1st	7	7.0	7.0
Semester	2nd	12	12.0	12.0
Semester	3rd	14	14.0	14.0
Semester	4th	14	14.0	14.0
Semester	5th	13	13.0	13.0
Semester	6th	14	14.0	14.0
Semester	7th	13	13.0	13.0
Semester	8th	13	13.0	13.0
	Total	100	100.0	100.0

Table 2: Descriptive Analysis

Descriptive Statistics and Reliability

Table 2. Means, standard deviations, and Cronbach's alpha — Simulated data

Scale	N	Mean	Std. Deviation	Items	Cronbach's Alpha
Fear of Negative Evaluation	100	3.201	0.658	12	0.911
Academic Self-Efficacy	100	3.655	0.534	8	0.834
Classroom Participation	100	3.309	0.607	10	0.886

Table 3. Pearson Correlations

Correlations

Table 3. Pearson Correlations — * Correlation is significant at the .05 level (2-tailed). Simulated data

Variable	FNE	Academic Self-Efficacy	Classroom Participation
FNE	1.000	-0.527*	-0.505*
Academic Self-Efficacy	-0.527*	1.000	0.565*
Classroom Participation	-0.505*	0.565*	1.000

hypothesized relationships between the three variables.

Table 4. Mediation Analysis

PROCESS Mediation Analysis

Table 4. Model 4 — 5,000 bootstrap samples; Outcome = Classroom Participation; Mediator = Academic Self-Efficacy

Effect / Path	Coefficient	SE	p / 95% Bootstrap CI
Path a: FNE → Academic Self-Efficacy	-0.427	0.070	0.000
Path b: Academic Self-Efficacy → Classroom Participation	0.469	0.107	0.000
Total effect c: FNE → Classroom Participation	-0.465	0.080	0.000
Direct effect c': FNE → Classroom Participation	-0.264	0.087	0.003
Indirect effect (a × b)	-0.203	—	[-0.315, -0.115]

Evaluation and Academic Self-Efficacy were negatively correlated, and Academic Self-Efficacy and Classroom Participation were positively correlated. Therefore, the indirect pathway indicates that the pathway between Fear of Negative Evaluation and Classroom Participation may be mediated by Academic Self-Efficacy. The results of this study were used to simulate support for the proposed mediation of Academic Self-Efficacy. Mediation statistics are values that were computed for research-practice purposes; the actual values in the dataset were used instead of the mediation values prior to submission or publication.

Discussion

The discussion should be based on actual SPSS findings. In the case of support of H1, this would suggest an inverse relationship between FNE and academic self-efficacy. In the case of H2, it would suggest that higher academic self-efficacy leads to higher involvement in the classroom. This is consistent with recent evidence that FNE can be an effective strategy to discourage undergraduate participation (Cooper et al., 2023; Cooper et al., 2025). The mediation result is to be considered independently. An indirect effect would suggest that, statistically speaking, part of the relationship between FNE and participation in the classroom goes through academic self-efficacy. It shouldn't be said causal because the study is cross sectional. The Pakistani context also needs to be taken into account. Rasheed and Shahid (2023) investigated the correlation between FNE and academic self-efficacy in university students of Lahore and concluded that there was no significant correlation between FNE and academic self-efficacy in the study sample. This

discovery suggests a need for an empirical test of the association, and that varying results may stem from sampling, instruments, and academic settings, cultural or institutional factors. The final discussion should be based on the actual SPSS findings. If H1 is supported, the result would indicate an inverse association between FNE and academic self-efficacy. If H2 is supported, it would indicate that stronger academic self-efficacy is associated with greater classroom participation. If H3 is supported, it would be consistent with recent evidence that FNE can discourage undergraduate participation (Cooper et al., 2023, 2025). The mediation result should be interpreted separately. A significant indirect effect would indicate that academic self-efficacy statistically accounts for part of the association between FNE and classroom participation. It should not be described as causal because the study is cross-sectional. The Pakistani context is also relevant. Rasheed and Shahid (2023) examined FNE and academic self-efficacy among university students in Lahore and reported a non-significant relationship between the two variables. This finding indicates that the association should be tested empirically rather than assumed, and differences may arise from sampling, instruments, academic contexts, or cultural and institutional factors.

Practical Implications

Based on the data provided in this report, the university might want to consider implementing the following classroom practices in light of an evaluation of the need to eliminate unnecessary evaluative pressure. Constructive feedback, small group discussion prior to whole class responses, preparation opportunities and explicit acknowledgement of mistakes as a part of learning can be utilized by instructors. Academic skills activities can also provide students with confidence in the study, writing and presentation of academic ideas.

Limitations

Limits the generalizability due to sample of 100 students and convenience sampling. The cross-sectional design does not allow for strong causal inferences. Social desirability or response bias can impact the results of self-report measures. Several other factors can also impact participation, including classroom climate, instructor practices, class size, teaching methods, language proficiency and academic discipline. There is a need to increase the sample size and sample types at various universities, to implement longitudinal data collection and to adopt mixed-method research. Moderators can also be investigated, including the instructor's support for the students, classroom environment, academic field, language proficiency, and presentation experience. Experimental research can be conducted to test interventions designed to decrease unnecessary evaluative pressure and boost academic self-efficacy.

Conclusion

The purpose of this study is to develop a focused model that connects fear of negative evaluation, academic self-efficacy, and University students' classroom participation. The model is based on recent evidence that FNE can impact student communication in the classroom at the undergraduate level, and that self-efficacy is still a significant factor in engagement in higher education. Final conclusion should be based upon the actual results that were achieved from the 100 participants.

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