

Exploring Fear of Public Speaking Using Self-Fulfilling Prophecy

Haryana Mohd Hairi^{1*}, Nurazlina Samsudin², Norhalida Othman³, Nina Diana Nawi⁴, Saktioto⁵

¹Faculty of Applied Sciences, Universiti Teknologi MARA, Johor Branch, Pasir Gudang Campus, Johor, Malaysia.

²Faculty of Business Management, Universiti Teknologi MARA, Selangor Branch, Puncak Alam Campus, Selangor, Malaysia

³Faculty of Electrical Engineering, Universiti Teknologi MARA, Johor Branch, Pasir Gudang Campus, Johor, Malaysia.

⁴Department Innovative Science and Mathematics Education, Faculty of Educational Sciences & Technology (FEST), Universiti Teknologi Malaysia, Johor, Malaysia

⁵Department of Physics, Universitas Riau, Pekanbaru, 28293, Indonesia.

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.909000211>

Received: 28 August 2025; Accepted: 03 September 2025; Published: 05 October 2025

ABSTRACT

Public speaking anxiety (PSA) remains a critical barrier to students' academic and professional growth. This quantitative cross-sectional study explores PSA through the lens of self-fulfilling prophecy involving 212 undergraduate students from a public university in Malaysia across science and social science disciplines was conducted using a validated 17-item Likert-scale instrument adapted from Merton's theory and Bartholomay & Houlihan's constructs. Findings revealed moderate to high levels of anxiety across cognitive, behavioral, and physiological domains. Statistical analysis showed strong positive correlations between belief and behavior ($r = .756$), behavior and outcome ($r = .803$), and outcome and belief ($r = .733$). These results confirm the cyclical nature of PSA and the reinforcing power of negative expectations. Distinct from previous studies, this research integrates belief-behavior-outcome relationships into a single model and highlights the need for cognitive-behavioral interventions in public speaking curricula. Findings underscore the role of internal beliefs in sustaining PSA and provide practical implications for educators to incorporate belief-management techniques into communication training.

Keywords- Public Speaking Anxiety, Self-Fulfilling Prophecy, Cognitive Beliefs, Undergraduate Students, Communication Apprehension, Behavioral Symptoms.

INTRODUCTION

Background of Study

Public speaking anxiety (PSA), or glossophobia, is among the most common forms of communication apprehension, affecting up to 75% of individuals. It manifests through physiological reactions (trembling, sweating), cognitive distress (fear of negative evaluation), and behavioral avoidance, all of which impair academic and professional communication. While PSA has been widely studied, inconsistencies across self-report, behavioral, and physiological measures suggest that underlying psychological mechanisms play a central role in sustaining anxiety (Gallego et al., 2021; McCroskey, 1982). Conventionally, PSA has been conceptualized through multidimensional lenses, with self-report, physiological, and behavioral indicators not always correlating (Gallego et al., 2021). This inconsistency suggests the presence of deeper psychological mechanisms, such as beliefs and expectations, shaping speaking performance in ways that empirical measures do not always capture.

One such mechanism is the self-fulfilling prophecy, a psychological phenomenon where individuals' beliefs and expectations about their ability—or inability—to succeed directly influence their behaviors and outcomes (Merton, 1948). When applied to public speaking, negative expectations ("I will fail, I'll freeze") can trigger avoidance, self-handicapping, anxiety, and ultimately confirm the expected poor performance—thus reinforcing the original belief (N. H. Rahmat, 2025). A pilot quantitative study by Rahmat (2025) among undergraduates confirmed that beliefs and expectations (key elements of the self-fulfilling prophecy model) had the highest mean influence on PSA, followed by behavior and outcomes. The authors found significant associations among all three components—suggesting that expectations shape behaviors and results in speaking contexts. Further support comes from a study conducted by Alnaeem (2025) which proved that there was a negative correlation between self-reinforcement and public speaking anxiety. These findings suggest that internal motivational strategies can play a protective role in managing performance-related stress.

An analytical cross-sectional survey conducted by Ahmed et. al. (2025) among 1130 medical undergraduate students from multiple universities in Sudan using the General Self-Efficacy (GSE) scale and Personal Report of Public Speaking Anxiety (PRPSA) scale. The outcomes of this study indicate that PSA for the respondent is a complicated, multidimensional issue influenced by cultural, psychological, and structural variables. Moreover, systematic reviews emphasize the need to tailor interventions like cognitive-behavioral therapy and improvisational training toward specific student groups to mitigate PSA more effectively (McWilliam, 2024).

Recent studies have begun to apply this perspective: Rahmat (2025) emphasized the influence of beliefs and expectations, while Ahmed et al. (2025) highlighted the multidimensional nature of PSA among medical students. However, these works either focus on a single student group or examine components in isolation. This study differs by integrating belief, behavior, and outcome into a unified cyclical model of PSA, applied across students from both science and social science disciplines. By empirically testing the correlations among these three dimensions, the research contributes a broader and more comprehensive understanding of how self-fulfilling prophecies perpetuate PSA. In doing so, it addresses disciplinary variations often overlooked and provides a stronger foundation for educational interventions targeting both cognitive and behavioral aspects of public speaking.

Statements of Problems

Public speaking anxiety (PSA) is a pervasive form of communication apprehension that significantly affects undergraduate students' academic performance, self-confidence, and professional preparedness. Despite widespread acknowledgment of PSA's impact, many interventions focus only on surface behaviors or situational triggers without addressing the deeper psychological mechanisms involved. Recent studies highlight that PSA is not merely a temporary fear but a recurring emotional and physiological reaction, often shaped by cognitive distortions such as fear of negative evaluation and low self-efficacy (Gallego et al., 2021; Z. R. Trisnaningati, 2021).

Among these cognitive mechanisms, the concept of the self-fulfilling prophecy offers a compelling explanation for the persistence of PSA. When students enter speaking situations with negative expectations—such as believing they will fail or be judged harshly—these beliefs can shape their behavior and attention in ways that increase the likelihood of poor performance, thereby reinforcing their fears (P. MacIntyre et.al, 2025; N. H. Rahmat, 2025). Cyclical thought patterns exacerbate anxiety and may discourage future participation in public speaking, resulting in prolonged avoidance and stagnation of skills.

Although PSA has been widely studied, few investigations have specifically explored its cyclical nature through the self-fulfilling prophecy framework, especially across disciplines among university students. Furthermore, existing research tends to treat PSA as a uniform experience, with limited attention to disciplinary differences despite evidence that students from various fields—such as sciences and social sciences—face different communicative expectations and stressors. This gap is critical, as understanding the internal belief systems and contextual nuances that influence PSA can enable more targeted, discipline-sensitive interventions.

Therefore, this study seeks to examine how the fear of public speaking among undergraduates is influenced by self-fulfilling prophecy mechanisms—particularly beliefs, expectations, and behavioral outcomes—and whether

these experiences vary between students in science and social science disciplines. By doing so, it contributes empirical evidence of the cyclical mechanisms driving PSA and offers insights for more comprehensive and psychologically grounded strategies to reduce speaking anxiety.

Objectives of the Study and Research Questions

This study is done to explore public speaking anxiety from the perspective of self-fulfilling prophecy. Specifically, this study is done to answer the following questions;

How do learners perceive their belief in public speaking anxiety?

How do learners perceive their behaviour in public speaking anxiety?

How do learners perceive outcome & reinforcement in public speaking anxiety?

Is there a relationship between all factors in public speaking anxiety?

LITERATURE REVIEW

Theoretical Framework of the Study

Theory of Self-Fulfilling Prophecy

The theory of self-fulfilling prophecy, introduced by Merton (1948), explains how an individual's false belief or negative expectation can influence their behavior in a way that causes the belief to become true. In the context of public speaking anxiety, this theory is particularly relevant. For example, when a person believes they will fail or embarrass themselves during a speech, this negative expectation increases their anxiety, reduces their confidence, and affects their performance. As a result, they may forget their lines, stutter, or avoid eye contact, which leads to a poor delivery and reinforces their original fear. This creates a cycle where the fear of failure contributes to actual failure, validating the initial belief. Studies have supported this link, showing that cognitive expectations and self-perception significantly impact public speaking performance (Bodie, 2010). Therefore, understanding the self-fulfilling prophecy provides valuable insight into how negative self-beliefs contribute to communication apprehension and highlights the importance of positive thinking and self-confidence in overcoming public speaking anxiety.

Causes of Fear of Public Speaking

Table 1 Factors Contributing to Anxiety in Public Speaking

Causes	Explanation	Link to Self-Fulfilling Prophecy
Not believing in yourself, worrying too much, being afraid of failing, and being afraid of making errors (Mao, 2022; Rivera & Villanueva, 2023)	When people think badly of themselves, they become anxious and avoid talking to others.	Negative belief ("I will fail") causes poor performance, reinforcing the fear.
Fear of negative evaluation, past traumatic experiences, perfectionism (Huda et al., 2024; Mardiani & Apriyani, 2021)	Expectation of being judged or embarrassed leads to distress and hesitation.	Anticipated criticism affects delivery, confirming the speakers' negative assumptions.

Limited vocabulary, grammatical errors, pronunciation issues (Kaplan-Rakowski & Gruber, 2023; Suparlan, 2021)	Language learners fear ridicule or misunderstanding during speaking.	Anxiety about language errors causes hesitation or silence, confirming lack of proficiency.
Sweaty palms, dry mouth, shaking, rapid heartbeat (Grieve et al., 2021)	Physical symptoms of anxiety disrupt concentration and performance.	Physical reactions validate internal fear and weaken confidence.

The causes of public speaking anxiety among students include factors such as psychological, emotional, and environmental factors. This fear often stems from a negative self-perception. Behaviorally, they experience physical signs of anxiety such as shaking hands, fidgeting, trembling voices, and difficulty making eye contact. Physiologically, symptoms include pounding heart, tension, sweating, and feeling unwell before or during speech. These symptoms reflect internalized negative expectations, supporting the self-fulfilling prophecy cycle where fear leads to anxiety, which in turn affects performance and reinforces fear. For instance, someone may believe they will make a mistake, receive criticism, or simply fall short. Due to prior negative experiences, inherent shyness or introverted personality traits, and excessive preoccupation with others' perceptions, individuals may develop low self-confidence in public speaking situations. Many people, especially those learning a new language, experience additional stress due to their fear of making mistakes or appearing "wrong." The worry appears much more real when the body responds with trembling hands or a dry mouth, which makes it hard to focus and perform well. Unfortunately, speaking may become challenging because of this fearful response, which further intensifies the person's initial anxiety, creating a vicious cycle from which it is difficult to break. This cycle is an illustration of the self-fulfilling prophecy, which states that we usually act in a way that makes failure inevitable if we believe it will occur. Understanding these causes enables us to see that public speaking anxiety is a highly emotional and psychological issue that can be overcome with practice, empathy, and encouraging feedback.

Past Studies on Fear of Public Speaking

Many studies have looked at how personality factors affect how confident people feel when they speak in front of a crowd. Maher & King (2023) said that people who don't have a lot of self-confidence and tend to talk badly about themselves often feel more anxious while speaking in front of an audience. People's worries about themselves make them do things that hurt their chances of achievement, such as not being ready or completely ignoring the problem. As evidenced by the self-fulfilling prophecy, this leads to poor performance, which makes their worries worse. Marinho et al. (2017) also said that their fear came from being a woman, not having enough experience speaking, and not being sure about the quality of their voice. The results showed that teaching kids how to speak in front of a group is an important part of their education. These findings show how important it is to help people feel more confident about speaking in front of others and to improve their communication skills in order to reduce public speaking anxiety, especially in those who are likely to suffer from it.

The study by Maher & King (2023) is done to study how cognitive and behavioural factors, including negative self-evaluations and fear of being judged while speaking in class, affect linguistic anxiety and classroom quiet. The study was done literature-based, cognitive-behavioral examination focused on language learners rather than a quantitative survey with numerical sample size. A cognitive-behavioral theoretical lens was used, reviewing past empirical studies on speaking anxiety and learner silence. The analysis draws from interview and observational data across previous research. The study found that anxious learners frequently harbor feared predictions about social costs and negative peer evaluation, leading to inhibited behaviour such as minimal verbal responses. These behaviors then reinforce their language anxiety in a self-perpetuating cycle. Maher and King emphasize that anxiety isn't solely caused by task difficulty; it is actively shaped by learners' cognitive interpretations and classroom context. Interventions should therefore target thought patterns and self-perceptions as well as encourage safe, supportive speaking environments.

Marinho et al. (2017) looked at how common public speaking anxiety is and what causes it among 1,135

undergraduate students at a Brazilian institution. The findings indicated that 63.9% of pupils were afraid to speak in front of others. Women, students who didn't speak in public very often, and students who thought their voices were too high-pitched or too quiet were more likely to feel this dread. The research used a cross-sectional survey methodology and the Self-Statements During Public Speaking Scale (SSPS) to find out how students thought and felt when they were speaking. Statistical research showed that anxiety levels were strongly linked to sociodemographic factors, self-image of voice, and how often someone practiced. It's interesting that 89.3% of students said they really wanted to take a formal public speaking class as part of their college education. This shows that people think there is a deficit in communication education and implies that higher education needs more systematic interventions. The results show that fear of public speaking is common and tightly linked to how people see themselves and what they see. So, schools should think about adding activities to help children grow their confidence, improve their communication skills, and learn how to speak in front of others to help them deal with stress and prepare for the communication needs of school and work.

The findings of this study are similar to Merton's (1948) idea of the Self-Fulfilling Prophecy (SFP), which says that people's expectations, especially negative ones, can change how they act in a way that makes the bad outcome come true. For example, if a student thinks they will fail or is worried about being embarrassed before a presentation, this might make them feel anxious and cause them to avoid the situation. As a consequence, this may lead to a bad performance, which would make the original worry worse. Both studies show that negative thoughts and anticipatory worry may keep learners stuck in a loop of dread and make it harder for them to do well. Looking at public speaking anxiety through the lens of the self-fulfilling prophecy shows that good remedies should go beyond just teaching people how to speak in front of others or giving them more experience. It's important to improve skills, but it's not enough. There should also be programs that help people deal with negative self-perceptions, ease their fear of being evaluated, and provide emotionally supportive learning environments. Teachers may help children build confidence, break habits of avoidance, and improve their communication skills by looking at both the mental and physical elements of anxiety.

Conceptual Framework of the Study

Fear of public speaking is a cycle that many have experienced. Merton's (1948) states that this cycle of fear is a self-fulfilling prophecy. In the context of public speaking anxiety, a person begins with a belief or expectation (cognitive factors) that the outcome of the public speech would be either positive or negative. This negative/positive feeling influences his/her behaviour (behavioural factor) leading to the speech. Finally, the outcome will be displayed when the person finally performs the presentation (physiological). This cycle can snowball to future presentation experiences (Rahmat et al., 2019) and the person becomes anxious whenever he/she is asked to make presentations.

Figure 2 below shows the conceptual framework of the study. This study is anchored from Merton's self-fulfilling prophecy to combine with Bartholomay & Houlihan's (2016) public speaking factors. This study also explores if there is a relationship between belief and behaviour. It also explores if there is a relationship between behaviour and outcome & reinforcement as well as outcome & reinforcement and belief.

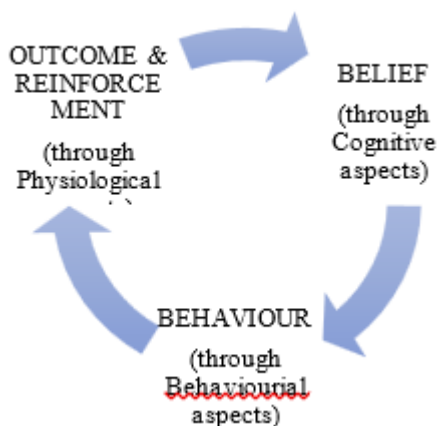


Fig. 2- Conceptual Framework of the Study Mapping Self-Fulfilling Prophecy and Fear of Public Speaking

METHODOLOGY

This quantitative study aims to investigate public speaking anxiety. A convenient sample of 212 students responded to the survey. The instrument (Table 2) used is a 5 Likert-scale survey and is rooted from self-prophecy theory by Merton (1948) and the constructs are replicated from Bartholomay & Houlihan (2016) to reveal the variables in Table 3 below. Table 2 below shows the categories used for the Likert scale; 1 is for Never, 2 is for Rarely, 3 is for Undecided, 4 is for Very Often and 5 is for Always.

Table 2 Likert Scale Use

1	Never
2	Rarely
3	Sometimes
4	Very Often
5	Always

Table 3 Distribution of Items in the Survey

No	Self-Fulfilling Prophecy	Variable	Sub-Category	Cronbach Alpha
B	Belief	Cognitive	8	.924
C	Behaviour	Behavioural	4	.859
D	Outcome & Reinforcement	Physiological	5	.880
		Total Items	17	.952

Table 3 also shows the reliability of the survey. The analysis shows a Cronbach alpha of .924 for beliefs, .859 for behaviour and .880 for outcome & reinforcement. The overall Cronbach alpha for all 17 items is .952: thus revealing the instrument's commendable reliability (Jackson, 2015). Subsequent analysis with SPSS is performed to present findings that address the research questions of this study

FINDINGS

Demographic Analysis

Table 3 Percentage for Demographic Profile

Question	Demographic Profile	Categories	Percentage (%)
1	Gender	Male	50%
		Female	50%
2	Academic Field	Social Sciences	70%
		Sciences	30%
3		Advanced	3%

	Self-Rating English Proficiency	Good	41%
		Moderate	49%
		Non-Speaker	7%

The demographic profile of the 212 respondents revealed an equal gender distribution, with 50% male and 50% female participants in Table 4. A majority (70%) were from social science disciplines, while 30% came from science backgrounds. Regarding self-rated English proficiency, 49% rated themselves as moderate, followed by 41% good, 3% advanced, and 7% non-speakers. These demographic patterns are significant when viewed through the lens of the self-fulfilling prophecy. According to Merton (1948), self-fulfilling prophecies are activated when individuals internalize expectations - whether based on their gender, academic background, or self-perceived ability - and subsequently behave in ways that make those expectations come true. For example, students from social science disciplines, who often face higher expectations to present or speak publicly, may internalize the belief that they must perform well or risk negative evaluation. This pressure can trigger anxiety that impairs performance, thereby reinforcing the original fear. Similarly, students who perceive themselves as moderately proficient in communication may enter public speaking situations anticipating failure, which heightens nervousness and contributes to behavioral symptoms of anxiety. These patterns are consistent with the findings of Rahmat (2025), who emphasized that belief systems rooted in one's academic environment and perceived abilities can shape outcomes through the cognitive-behavioral loop of expectation, behavior, and reinforcement. Therefore, understanding these demographic patterns helps illuminate how self-imposed beliefs may influence students' public speaking experiences in line with the self-fulfilling prophecy framework.

Descriptive Statistics

Findings for Beliefs

This section presents data to answer research question 1- How do learners perceive their belief in public speaking anxiety?

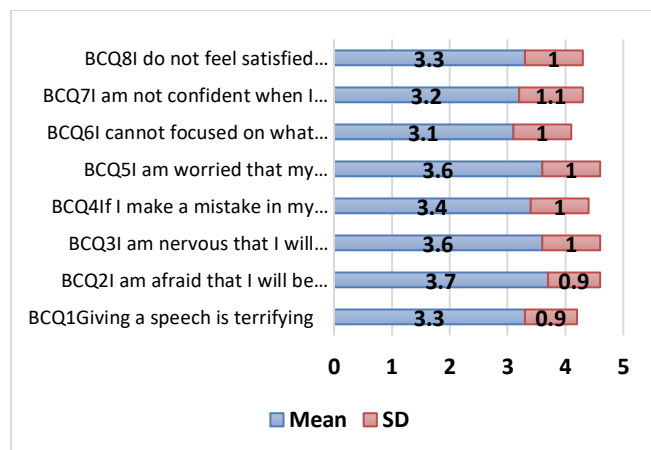


Fig. 3- Mean for Beliefs

Figure 3 above presents the mean for beliefs. The highest mean is item 2 (mean=3.7, SD=0.9). This item states that the learners are afraid that they would be lost for words while speaking. Next, item 3 (mean=3.6, SD=1.0) which reports that the learners were nervous that they would embarrass themselves in the presence of the audience. The lowest mean is item number 6 (mean=3.1, SD=1.0) which states that the learners could not focus on what they were saying during their speech.

Findings for Behaviour

This section presents data to answer Research Question 2 - How do learners perceive their behaviour in public speaking anxiety? In the context of this study, this is measured by behavioural aspects.

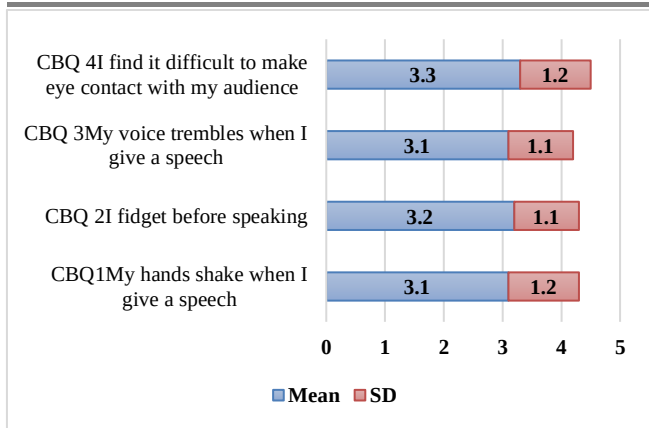


Fig. 4- Mean for Behavioural

The findings presented in Figure 4 pertain to behavioral responses, revealing that learners exhibited noticeable physical signs of public speaking anxiety. Their moderate mean scores across four behavioral indicators underscores this observation. The statement “I find it difficult to make eye contact with my audience” received the highest mean score ($M = 3.3$, $SD = 1.2$), indicating that maintaining eye contact—an essential component of confident delivery—was particularly challenging for many students. This was closely followed by the statements “I fidget before speaking” ($M = 3.2$, $SD = 1.1$) and “My hands shake when I give a speech” ($M = 3.1$, $SD = 1.2$), which suggest visible signs of nervous energy and restlessness both before and during speeches. Additionally, the statement “My voice trembles when I give a speech” also yielded a moderate score ($M = 3.1$, $SD = 1.1$), reflecting vocal instability as a common manifestation of anxiety. Overall, these results emphasize that behavioral symptoms such as trembling, fidgeting, and avoiding eye contact are prevalent among students facing public speaking anxiety. This supports the idea that anxiety is not only an internal experience but also externally observable through body language and vocal cues.

Findings Outcome & Reinforcement

This section presents data to answer research question 3- How do learners perceive outcome & reinforcement in public speaking anxiety? In the context of this study, this is measured by physiological fear.

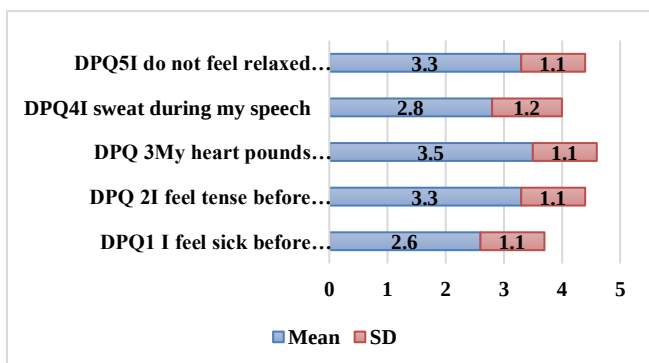


Fig. 5- Mean for Physiological

The findings presented in Figure 5 suggest that people who have to speak in front of others exhibit a lot of bodily indicators of dread. The most obvious sign was a racing heart while speaking ($M = 3.5$, $SD = 1.1$), followed by not being able to relax ($M = 3.3$, $SD = 1.1$) and being stressed out before the speech ($M = 3.3$, $SD = 1.1$). People said they sweated during lectures ($M = 2.8$, $SD = 1.2$) and felt unwell before speeches ($M = 2.6$, $SD = 1.1$), although these were less prevalent. The findings are similar to Bodie's (2010) research, which revealed that physical indicators including a rapid heart rate and tension are crucial markers of fear about communicating. Behnke and Sawyer (2000) also discovered that anticipatory anxiety generally peaks soon before speaking, as demonstrated by physiological arousal. Marinho et al. (2017) said that physical discomfort makes fear worse, especially in students who don't practice or feel secure, which makes anxiety worse.

Exploratory Statistics

Findings for Relationship between all factors in public speaking anxiety. This section presents data to answer research question 4- Is there a relationship between all factors in public speaking anxiety?

To determine if there is a significant association in the mean scores between all factors in public speaking anxiety, data is analysed using SPSS for correlations. Results are presented separately in Table 5,6 and 7 below.

Table 5 Correlation Between Belief and Behaviour

		Belief	Behaviour
Belief	Pearson (Correlation)	1	.756**
	Sig (2-tailed)		.000
	N	121	121
Behaviour	Pearson (Correlation)	.714**	1
	Sig (2-tailed)	.000	
	N	121	121

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

Table 5 shows there is an association between belief and behaviour. Correlation analysis shows that there is a highly significant association between belief and behaviour ($r=.756^{**}$) and ($p=.000$). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between belief and behaviour.

Table 6 Correlation Between Behaviour and Outcome & Reinforcement

		Behaviour	Outcome & Reinforcement
Behaviour	Pearson (Correlation)	1	.803**
	Sig (2-tailed)		.000
	N	121	121
Outcome & Reinforcement	Pearson (Correlation)	.803**	1
	Sig (2-tailed)	.000	

	N	121	121
--	---	-----	-----

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

Table 6 shows there is an association behaviour and outcome & reinforcement. Correlation analysis shows that there is strong correlation between behavior, outcome, and reinforcement ($r=.803^{**}$) and ($p=.000$). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship behaviour and outcome & reinforcement.

Table 7 Correlation Between Outcome & Reinforcement and Belief

		Outcome & Reinforcement	Belief
Outcome & Reinforce ment	Pearson (Correlation)	1	.733**
	Sig (2-tailed)		.000
	N	121	121
Belief	Pearson (Correlation)	.733**	1
	Sig (2-tailed)	.000	
	N	121	121

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

Table 7 shows there is an association outcome & reinforcement and belief. Correlation analysis shows that there is a high significant association between outcome & reinforcement and belief ($r=.733^{**}$) and ($p=.000$). Jackson (2015) states that the coefficient is significant at the .05 level, with positive correlation quantified on a scale from 0.1 to 1.0. A weak positive correlation ranges from 0.1 to 0.3, a moderate positive correlation from 0.3 to 0.5, and a strong positive correlation from 0.5 to 1.0. This indicates a robust positive correlation between outcome & reinforcement and belief.

CONCLUSIONS

Summary of Findings and Discussions

Numerous prior studies indicate that self-efficacy is crucial in mitigating individual anxiety levels. Based on other literature reviews, an internal element that can diminish anxiety levels is an individual's capacity to regulate emotions over experiences linked to specific situations.

This study applied Merton's self-fulfilling prophecy framework to examine public speaking anxiety (PSA) among undergraduates across science and social science disciplines. By integrating beliefs, behaviors, and outcomes into a single cyclical model, the research moves beyond prior studies that examined these factors in isolation. The first research question explored learners' beliefs about public speaking. Results indicated that the strongest fear was being lost for words, followed by fear of embarrassment. These findings are consistent with

Maher & King (2023), who noted that negative self-evaluations and fear of judgment shape learner anxiety and silence.

The second research question addressed behavioral responses. Students commonly experienced difficulty with eye contact, voice tremors, and physical restlessness—confirming earlier findings by Bodie (2010), who described these behaviors as observable signs of communication apprehension. The third research question highlighted physiological symptoms, with a pounding heart, tension, and lack of relaxation being the most reported. These are consistent with Marinho et al. (2017) and Behnke & Sawyer (2000), who found that anxiety manifests as physical discomfort during speech delivery.

The fourth research question explored relationships among the three components. The results revealed strong positive correlations between belief and behavior ($r = .756$), behavior and physiological outcomes ($r = .803$), and outcome and belief ($r = .733$). These statistically significant associations affirm Merton's (1948) theory that expectations influence behaviors and outcomes in a reinforcing cycle. Together, the findings validate the conceptual framework proposed in this study and demonstrate that PSA is a self-perpetuating phenomenon influenced by cognitive, behavioral, and physiological dimensions.

The findings highlight that PSA is not merely a situational fear but a cycle perpetuated by internal beliefs. This underscores the importance of interventions that target psychological readiness alongside technical speaking skills. In particular, communication instructors can play a transformative role by embedding belief-management strategies—such as cognitive restructuring, peer modeling, supportive feedback, mindfulness practices, and gradual exposure—into speaking curricula. Doing so enables students to break the negative feedback loop and build long-term confidence in academic and professional communication.

Beyond pedagogical insights, this study contributes theoretically by expanding the application of the self-fulfilling prophecy to communication anxiety in higher education. It also offers practical guidance for educators seeking evidence-based methods to reduce PSA. Nevertheless, the study's scope is limited by its participant diversity and reliance on correlational analysis. Future research should adopt advanced modeling techniques and intervention-based designs to further test causal mechanisms and long-term effects.

In conclusion, addressing PSA requires a dual emphasis on internal belief systems and observable performance skills. By recognizing and reshaping students' expectations, educators can disrupt the cycle of fear and foster greater resilience, preparing undergraduates to engage confidently in both academic and professional speaking contexts.

Implications and Suggestions for Future Research

Theoretical and Conceptual Implications

This study extends the application of Merton's self-fulfilling prophecy by empirically validating its relevance to public speaking anxiety. The findings confirm that belief systems not only influence behavior and physiological responses but also form feedback loops that sustain PSA. This supports the call by N. H. Rahmat et al. (2019) to consider both internal and external psychological factors in speech anxiety research. The integration of Bartholomay & Houlihan's constructs also reinforces the need for multidimensional models in future studies.

Pedagogical Implications

Given the clear link between internal beliefs and observable anxiety symptoms, educators must integrate belief-management techniques into public speaking pedagogy. Beyond teaching delivery skills, communication instructors should incorporate strategies that reshape students' self-perceptions and expectations. Practical approaches include:

Cognitive restructuring tasks that help students recognize and swap negative self-talk with constructive affirmations

Vicarious learning opportunities, such as peer modeling or observation of confident speakers, which demonstrate

that successful performance is feasible.

Gradual exposure approaches, where students advance from low-stakes speaking assignments to more formal presentations, allowing confidence to build incrementally.

Supportive feedback systems, emphasizing growth and effort rather than perfection, to counteract fear of negative evaluation.

Mindfulness or relaxation techniques, which can regulate physiological symptoms like trembling or rapid heartbeat before presentations.

Additionally, structured speaking classes that address both technical skills and mental readiness—as suggested by Marinho et al. (2017)—can help students build confidence and resilience. By embedding these belief-focused interventions into curricula, instructors can help students break the cyclical loop of negative expectations described by the self-fulfilling prophecy. Ultimately, a dual emphasis on technical proficiency and psychological readiness will better prepare undergraduates to face academic and professional speaking demands with resilience.

Suggestions for Future Research

While this study confirms the cyclical nature of PSA through the self-fulfilling prophecy framework, further research is needed to deepen and broaden these findings. Future studies should employ advanced statistical techniques such as regression analysis, mediation, or structural equation modeling (SEM) to test causal pathways between beliefs, behaviors, and outcomes. This would strengthen the explanatory power of the model beyond correlational evidence.

Secondly, intervention-based research is essential. Approaches such as cognitive-behavioral training (e.g., cognitive restructuring, positive self-talk), mindfulness-based stress reduction (MBSR), and technology-enhanced exposure (virtual or augmented reality simulations of public speaking) have shown promise in reducing anxiety among students. Experimental or quasi-experimental studies could evaluate the effectiveness of these methods in classroom or training contexts.

Next, comparative studies across academic disciplines, cultural contexts, and linguistic backgrounds would provide greater generalizability. For example, communication challenges in science faculties may differ from those in social sciences, while multilingual environments may amplify anxiety differently than monolingual ones.

Finally, longitudinal studies tracking students' PSA trajectories over multiple semesters or years would clarify whether interventions targeting beliefs and expectations produce sustainable improvements in confidence and performance. Such designs could reveal whether the cyclical loop of PSA can be permanently disrupted through targeted pedagogical strategies.

These future directions can enhance the theoretical strength of self-fulfilling prophesy applications and produce practical insights for mitigating PSA across various learning environments.

REFERENCES

1. Ahmed, W. M. M., Abdalmotalib, M. M., Mohammed, G. T. F., Siddig, M. M. Y., Salih, H. S., Ahmed, A. A. A., & Abdullateef, S. salah E. (2025). Public speaking anxiety and self-efficacy among Sudanese medical students: a cross-sectional study. *BMC Psychology*, 13(1). <https://doi.org/10.1186/s40359-025-02958-9>
2. Alnaeem, L. A. (2025). The Power of Self-Talk for Speaking Anxiety Reduction Among EFL Learners. *Theory & Practice in Language Studies (TPLS)*, 15(1).
3. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bao, D. (2014). *Understanding silence and reticence: Ways of participating in second language acquisition*.

4. Bartholomay, E. M., & Houlihan, D. D. (2016). Public Speaking Anxiety Scale: Preliminary psychometric data and scale validation. *Personality and Individual Differences*, 94, 211–215. <https://doi.org/10.1016/j.paid.2016.01.026>
5. Bodie, G. D. (2010). A racing heart, rattling knees, and ruminative thoughts: Defining, explaining, and treating public speaking anxiety. *Communication Education*, 59(1), 70–105. <https://doi.org/10.1080/03634520903443849>
6. Gallego, A., McHugh, L., Penttonen, M., & Lappalainen, R. (2022). Measuring public speaking anxiety: self-report, behavioral, and physiological. *Behavior Modification*, 46(4), 782-798.
7. Jackson, S. L. (2015). *Research methods and Statistics-A Critical Thinking Approach* (5th Edition). Boston, USA: Cengage Learning.
8. Lintner, T., & Belovecová, B. (2024). Demographic predictors of public speaking anxiety among university students. *Current Psychology*, 43(30), 25215–25223. <https://doi.org/10.1007/s12144-024-06216-w>
9. MacIntyre, P., Panahi, A., & Mohebbi, H. (2025). Peter D. MacIntyre's 35-Year Research Contribution to Psychology, Language Education and Communication: A Systematic Review. *Language Teaching Research*, 48, 297-336.
10. Maher, K., & King, J. (2023). Language anxiety and learner silence in the classroom from a cognitive-behavioral perspective. *Annual Review of Applied Linguistics*, 43, 97–113. <https://doi.org/10.1017/S0267190523000067>
11. Marinho, A. C. F., de Medeiros, A. M., Côrtes Gama, A. C., & Teixeira, L. C. (2017). Fear of public speaking: Perception of college students and correlates. *Journal of Voice*, 31(1), 127.e7–127.e11. <https://doi.org/10.1016/j.jvoice.2015.12.012>
12. McWilliam, A. (2024). *Public Speaking Anxiety: Past, Present, and Future* (Doctoral dissertation, Bangor University (United Kingdom))
13. Merton, R. (1948). The Self-Fulfilling Prophecy. *The Antioch Review*, 8, 193-210. <http://dx.doi.org/10.2307/4609267>
14. Merton, R. K. (1948). The self-fulfilling prophecy. *The Antioch Review*, 8(2), 193–210. <https://doi.org/10.2307/4609267>
15. Mishu, A., Mohammed, H. A., Hakami, S. A. A., & Chowdhury, G. (2023). The impact of online presentations on reducing the introverted EFL learners' stress and anxiety. *Saudi Journal of Language Studies*, 3(1), 32–46. <https://doi.org/10.1108/sjls-03-2022-0037>
16. Quvanch, Z., Qasemi, A. S., & Na, K. S. (2024). Analyzing levels, factors and coping strategies of speaking anxiety among EFL undergraduates in Afghanistan. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2413225>
17. Rahmat, N. H. (2025). The influence of beliefs & expectations on public speaking anxiety. *International Journal of Research and Innovation in Social Science*, 9(6), 640–649
18. Rahmat, N. H., Othman, N. A., Kassim, A. A. M., Khairuddin, Z., & Aripin, N. (2019). The Cycle of Self-Fulfilling Prophecy in Academic Writing. *European Journal of Education Studies*, 5(11), 254-269. <https://oapub.org/edu/index.php/ejes/article/view/2326/4965>
19. Rodero, E., & Larrea, O. (2022). Virtual reality with distractors to overcome public speaking anxiety in university students. *Comunicar*, 30(72), 85–96. <https://doi.org/10.3916/C72-2022-07>
20. Tabuchi, K., Kobayashi, S., Fukuda, S. T., & Nakagawa, Y. (2024). A Case Study on Reducing Language Anxiety and Enhancing Speaking Skills Through Online Conversation Lessons. *Technology in Language Teaching and Learning*, 6(3), 1–21. <https://doi.org/10.29140/tltl.v6n3.1497>
21. Trisnaningati, Z. R., & Christian, F. (2021, April). Self-efficacy, emotional regulation, communication competence and public speaking anxiety towards students. In *Proceedings of the International Conference on Psychological Studies (ICPSYCHE 2020)* (Vol. 530, pp. 68-74). Atlantis Press.
22. Ul Huda, N., Bibi, M., Muhammad Sajjad, Mukhtar, S., & Mukhtar, R. (2024). Stage Fright to Scholarly Flight: The Impact of Public Speaking Anxiety and Fear of Negative Evaluation on Academic Performance in University Students. *Journal of Health and Rehabilitation Research*, 4(3), 1–7. <https://doi.org/10.61919/jhrr.v4i3.1331>