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# The Mediating Effect of School Culture on the Relationship Between Student Engagement and Public Speaking Class Anxiety

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Abstract— This study determined the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety among first-year college students of selected tertiary schools in Panabo City, Davao del Norte, with 346 respondents. The researcher used a stratified random sampling technique using Slovin's formula to get the ideal sample size. Moreover, this study utilized a non-experimental quantitative research design employing a descriptive correlational approach. Furthermore, the findings revealed that the level of student engagement is high, the level of public speaking class anxiety is moderate, and the level of school culture is also high. The correlation analysis between student engagement and public speaking anxiety (r-value: 0.479), student engagement and school culture (rvalue: 0.642), and school culture and public speaking class anxiety (r-value: 0.354) tested at 0.05 level of significance, the hypothesis was rejected which indicates that the results mean that there is a significant relationship among the three correlational variables. The findings proved a partial mediation. Thus, this proves that the higher the students are engaged, the more they can reduce their level of public speaking anxiety, and this positive relationship could be affected significantly by the mediating interventions of school culture.

*Keywords*— descriptive correlational, Philippines, public speaking anxiety, school culture, and student engagement.

#### I. INTRODUCTION

Roughly, every profession demands public speaking (Pravis, L. 44). Regardless of your field, public speaking is inevitable and significant as this competitive world necessitates. However, we cannot deny that many people, especially students, are experiencing public speaking anxiety. As Dwyer and Davidson (103); Sawyer (413) firmly believed that speaking in public is the most reported apprehension in the general population. They tend to feel uneasiness and anxiety caused by a lack of confidence, sometimes making them feel somewhat threatened by the situation. This situation is prevalent among all speakers; even native English speakers are afraid (Bottles, 77). According to Kim (59), compared to other skills, students demonstrated higher anxiety in speaking. In the study of Raja, Farhan (94), 75% of his respondents admitted experiencing public speaking anxiety. Marinho et al. (4) revealed that 63.9% of college students reported a fear of public speaking and that as many as 89.3% of the students would like their undergraduate program to include classes to improve public speaking. Moreover, the National Institute of Mental Health (NIMH) reported that general-speaking anxiety affects 73% of the population. Furthermore, in Finland, the ratio of 1:3 students said

that public speaking is one of their greatest struggles (Kunttu et al. 48).

As determined by the released article entitled The Importance of Developing Public Speaking, engaging our students in public speaking is beneficial in many ways. Hence, we are helping them increase their confidence and self-esteem to break the wall hindering them from successful public speaking (Morgan 115; Clark and Greatbatch 27; Roos 549). In the same way, amplifying public speaking skills in all aspects has become one of the hallmarks of "social solidarity, social ranking, and professional capabilities." Moreover, the study of Raja (154) revealed that 95% of the participants agreed that with the provision of proper coaching, instruction, and other necessary activities, they could overcome the fear. Hence, exposure to a public speaking environment can enable their confidence regardless of the audience size.

Theories, concepts, facts, information, views, and readings related to the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety are presented thoroughly in this section.



It is difficult to deny that public speaking is a necessity to our day-to-day existence than most of us consciously perceive, as emphasized by Verderber et al. (17). Consequently, having an effective public speaking skill is crucial to achieving essential goals; however, if the anxiety goes in the way, this can create a severe backlash on one's career (Pertaub et al. 73). Floyd (21) added that public speaking anxiety causes stressful effects on our mind, body, and behavior; which triggers a fight-orflight response, whereas our usual response is either to confront the source of our stress (fight) or to avoid it (flight). Nevertheless, when the event causes fear, the person is more likely to want to flee than fight. Also, Horwitz et al. (125) stated that in other situations, not only those non-performer students have anxiety many claims to experience mental blocks though these people may be good learners, strongly motivated, and have a positive outlook toward the target language. Therefore, this anxiety reaction impedes their ability to perform successfully in a foreign language class.

Point often overlooked is that English public speaking anxiety arises due to the students' insufficient engagement opportunities to participate in various communication activities. (Udomkit, 24). Zepke and Leach (48) cited that student engagement included emotional reactions, which involve students' active participation, cognitive investment, and emotional commitment to learning certain content, foregrounded that student engagement is the critical element in the growth of learning communities in our education system (BIS, 343). Thus, Schullery and Gibson (15) mentioned that application and practice are ultra-practical means of decreasing and controlling apprehension and nervousness when speaking in a crowd. Therefore, students' engagement in school activities that involves communication skills development is a necessary construct that is associated with the success of the student (Hart et al. 67). And to strengthen the claim, Westwick (64) mentioned that through the provision of various activities and assessments with inherently challenging tasks will be able to provide an avenue of overcoming students fear and reducing the level of anxiety of talking in the classroom. They will not show inherent symptoms (Akin and Kunzman 109). In addition, Velden (78) highlighted that within the context of academe, student engagement as commonly associated with the psychology of individual learning; the level of student's involvement with their studies in terms of motivation, the depth of their intellectual

perception, or simply the seriousness they display in studying.

Students display active engagement manifesting taking ownership of their learning growth and collaborating with academic practitioners to ensure academic success. Likewise, Khan (71) mentioned that student engagement is significantly related to school culture. According to the findings, school heads should build and encourage school culture to improve student engagement. Via shared vision and professional values, school culture allows students to share their expertise in a collaborative and collegial environment. However, Shamsuddin et al. (63) pointed out that the problem of conquering students speaking anxiety should not be narrowed down to the notion of public speaking alone but should be glanced at in a broader context. Amsalu (191) clearly expressed that the outcomes of school having a solid relationship with the nature of school culture specifically transcending the visions, missions, and values emanating from existing policies, rules, and regulations of the governing bodies and constant communication among stakeholders and students' engagement during the implementation process is very vital in achieving a particular goal. Therefore, an active engagement of the students in implementing the schools' designed policies can bring outstanding results. Also, It was emphasized by Amsalu (190) that the performance of educational institutions could be determined by the nature of school including quality administration, culture, the commitment of teachers, and students' motivation for their learning endeavors. Students' involvement with activities and conditions will likely generate highquality learning (Coates 7).

In the study of Melese and Molla (190), the quantitative data showed the statistical significance of the contribution of the school culture to students' academic achievement. The result implies that the support system provided by the teacher and other responsible bodies was seen as effective. School culture is defined as complex traditions and rituals built over time as teachers, students, parents, and administrators work together to deal with crises and accomplishments (Schein 45). The book by Pawilen et al. (45) explicitly said that school culture is portrayed by well-established beliefs, values, and traditions which are common among schools, unique, and even embedded in the history of particular schools. Schuermann et al. pointed out that school culture refers to how the institution creates and



implements written and unwritten rules shared by school members and stakeholders to help shape the success of an institution's endeavor. Bodie (89) suggested various reasons and research as to why a person experiences PSA, and it is conceptualized as a trait and a state.

Significantly, there are existing volumes of research on how to treat and reduce PSA –there are cognitivebehavioral remedies, exposure activities, and skills training engagement which narrow down how the institution constructs and implements such necessary programs (Arnold 21). Marinho et al. (4) revealed that 63.9% of college students reported a fear of public speaking and that as many as 89.3% of the students would like their undergraduate program to include classes to improve public speaking. Likewise, Plandano et al. (1446) recommended that public speaking should be offered as a subject to all degree programs at the tertiary level, especially for teacher education programs.

This study is anchored on the conditioning theory used by Hoffman et al. (1995) entitled –Conditioning Theory: A Model for the Etiology of public speaking anxiety. This conditioning theory is formulated by Rachman (1976, 1977), following the footsteps of Watson (1924) and Mowrer (1939), implying the idea that anxiety is a conditioned response (CR) elicited in the presence of a conditioned stimulus (CS). WhichRachman mentioned the two pathways to anxiety: Direct conditioning (an aversive unconditioned stimulus (UCS) paired with a neutral stimulus and becomes a CS) and indirect conditioning (which includes vicarious and informational learning). As Barlow (1988) hypothesized that direct conditioning from two kinds of aversive UCS is possible: a "false alarm" (a panic attack) and a "true alarm" (an external traumatic situation). Either can become associated with internal (student engagement) or external (school culture) stimuli, which then become "learned alarms" or CSs.

The independent variable of the study is student engagement (Hart et al. 73) with the following indicators: affective engagement (liking for learning), affective engagement (liking for school), behavioral engagement (effort and persistence), behavioral engagement (extracurricular activities), and cognitive engagement. Meanwhile, the dependent variable is a public speaking class anxiety (Usaha and Yaikhong 23-35) with the following indicators: foreign language classroom anxiety, Personal report of communication apprehension, personal report of public speaking anxiety, and speaker anxiety. On the other hand, the mediating variable is the school culture (Wagner 41) with the following indicators: professional collaboration, affiliative collegiality selfdetermination/efficacy.

The study was conducted to determine the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety. Specifically, the study was conducted to seek answers to the following objectives: First is to ascertain the level of student engagement in terms of affective engagement (liking for learning), affective engagement (liking for school), behavioral engagement (effort and persistence); behavioral engagement (extracurricular activities); and cognitive engagement. The second is to ascertain the level of public speaking class anxiety in terms of foreign language classroom anxiety; personal report of communication of apprehension; personal report of public speaking anxiety; and speaker anxiety. The third is to measure the level of school culture in terms of professional collaboration, affiliative collegiality, and self-determination. Fourth is to establish the significance of the relationship between student engagement and public speaking class anxiety, student engagement and school culture, and school culture and public speaking class anxiety. Furthermore lastly, it is to determine the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety.

The study's hypothesis was tested at a 0.05 significance level, stating that a significant relationship exists between student engagement and public speaking class anxiety. Followed by there is no significant relationship between student engagement and school culture. Subsequently, there is no significant relationship between school culture and public speaking class anxiety. Lastly, there is no significant relationship between the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety.

#### METHOD

This chapter exhibits the methods and procedures used in this study, including the participants, research instrument, research design, data collection, and statistical tools.



This study's target participant were first-year college students of four selected private and government tertiary institutions in Panabo City, Davao del Norte. The total number of students who form part of the study is 346. The respondents were first-year college students who underwent a purposive communication subject where the students encountered class oral recitations, delivering public speaking and other similar activities, aged 18 years old and above, and limited to no specific gender. The particular groups were selected through stratified random sampling preferred by the researcher. Stratified random sampling is a type of sampling from the population that can be segmented into smaller populations whereby a researcher determines a specific group as a sample size for the research. It could be advantageous when sampling each subpopulation unilaterally (Botev & Riddler, 2017). However, students under 18 years old and not first year college students who were mentally unfit to answer the survey questionnaire, absent or unavailable at the moment the questionnaire was administered, were excluded as respondents.

In order to get the ideal sample size of the population, the researcher utilized the stratified random sampling technique using Slovin's formula. The desired sample size was determined by using the maximum sample of Slovin's Formula. Slovin's formula is used to compute the sample size (n) with the population size (N) and an error margin (e). It is a sampling technique formula to estimate the sampling size. In order to get the ideal sample size of the population, the researcher utilized the stratified random sampling technique. With the data provided by the selected institution, the researcher administered 33% to School A, 25% to School B, 21% to School C, and the remaining 21% came from School D. However, the respondents can withdraw anytime if they think it is not favorable to them and they feel threatened.

This study was conducted within Panabo City, Davao del Norte, to resolve concerns regarding school culture, student engagement, and public speaking class anxiety. Moreover, the City of Panabo is located between the two bustling cities of Tagum and Tibungco (Davao City), Region XI. It is within the latitude of 1250 to 44" North and Longitude of  $7^{\circ}$ ,14" and 23" East. The municipality of Carmen borders it to the northwest and the city of Davao to the west.

Subsequently, three sets of instruments were used in the study. The first was used to measure student engagement, the second was utilized to measure public speaking class anxiety, and the third was employed to measure school culture. To measure the level of student engagement as the independent variable, the researcher adopted the standardized survey of Hart et al. (73) with the following indicators: affective engagement (liking for learning), affective engagement (liking for school), behavioral engagement (effort and persistence), behavioral engagement (extracurricular activities), and cognitive engagement. On the other hand, to measure the level of public speaking class anxiety as the dependent variable, the researcher made use of a standardized questionnaire developed by Usaha and Yaikhong (23-35) with the following indicators: foreign language classroom anxiety, Personal report of communication apprehension, personal report of public speaking anxiety, and speaker anxiety. Lastly, to measure the level of school culture as the mediating variable, the survey questionnaire of Wagner (41) was used. Rest assured that the content of the instruments was presented to the group of experts for validation.

In evaluating the level of student engagement, public speaking class anxiety, and school culture, the five orderable gradations with their respective range of means and description were considered: 4.20- 5.00 with a descriptive equivalent of Very High and interpreted that the item is always manifested; 3.40- 4.19 with a descriptive equivalent of High, and interpreted as the item is oftentimes manifested; 2.60- 3.39 described as Moderate and means that the item is sometimes manifested; 1.80- 2.59 described as Low and means that the item is seldom manifested; and lastly, 1.00- 1.79 described as Very Low and interpreted that the item is never manifested.

As part of the process, the three sets of instruments were subjected to pilot testing with 30 respondents to determine the Cronbach Alpha values before the content validation by the experts. Upon the reliability test, the independent variable (student engagement) generated a Cronbach Alpha of 0.905, higher than the required 0.70 of the reliability from the pilot testing of the scale given to the respondents. While the dependent variable (public speaking class anxiety) generated a Cronbach Alpha of 0.944, higher than 0.70 of the required Cronbach Alpha value, and the mediating variable (school culture) got 0.872 which is more significant than 0.70. All three



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variables generated an overall Cronbach Alpha of 0.907, higher than the required 0.70.

This study utilized a non-experimental quantitative research design employing a descriptive-correlational technique with adopted standardized questionnaires to gather data from the respondents. This procedure determines the relationship between two or more variables and examines the level to which one or more relationship exists.

After the approval of the panel members, the researcher underwent the following steps and procedures in gathering data for the study: The researcher asked permission from the director or school heads of selected tertiary schools in Panabo City to conduct the study. Then, the researcher secured a letter of approval from the director's or school head's office. Upon approval, the letter of endorsement was sought to accommodate the researcher to administer the survey questionnaire to the study's respondents. Likewise, the researcher asked for approval from the school teachers to distribute the survey questionnaire along with the informed consent form to their respective students. The researcher personally handed the questionnaire, explained the research tool and its purpose, and conducted a briefing and debriefing to the prospective respondents before administration to ensure they were completely aware of their right to withdraw. Furthermore, the researcher retrieved the survey questionnaires after the respondents answered all the items. The researcher was responsible for ensuring the data was secured under RA 9262. Finally, the researcher tallied and tabulated all the data gathered from the respondents, subjected to statistical analyses, and with the guidance of a qualified statistician recommended by the University. The statistical results were analyzed and interpreted. With the data, conclusions were drawn, and recommendations were formulated based on the study's findings.

The statistical tools used for data analysis and interpretation are the following:

- *Mean.* This statistical tool will be used to determine the level of student engagement, public speaking class anxiety, and school culture.
- *Pearson (r).* This statistical tool will determine the significant relationship between student engagement and public speaking class anxiety, the significant relationship between student

engagement and school culture, and the significant relationship between school culture and public speaking class anxiety.

- *Simple Regression Analysis.* This statistical tool will determine the influence of student engagement and school culture on public speaking class anxiety.
- *Sobel Test.* This statistical tool will be used to determine the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety.

In conformance with the guidelines set by the University of Mindanao Ethics Review Committee, the researcher took certain steps to ensure that respect, beneficence, and justice were observed. To achieve such, voluntary participation, privacy and confidentiality, informed consent process, recruitment, risk identification and mitigation, and identification of potential benefits will be applied during the data gathering and writing process of the study. Other ethical issues such as plagiarism falsification, fabrication, conflict of interest identification, deceit, permission from organization or location, and authorship will be observed during the whole course of the study. UMERC approved this study with protocol no. UMERC-2023-118.

## **RESULT AND DISCUSSION**

Established in this chapter are the data and the analysis of findings based on the respondents' responses on school culture, student engagement, and public speaking class anxiety in selected tertiary schools in Panabo City, Davao del Norte. Tables are arranged in the following subheadings: level of students' engagement, level of public speaking class anxiety, level of school culture, the significance of the relationship between students' engagement and public speaking class anxiety, student engagement and culture, and school culture and public speaking class anxiety, and test of the mediating effect of school culture on the relationship between student engagement and public speaking class anxiety.

## Level of Student Engagement

Shown in Table 1 are the descriptive statistic results on assessing the level of student engagement, which has an overall mean of 4.02 ( $\sigma$ =0.85), described as High. This means that the students' engagement is oftentimes manifested among the respondents. Among the five indicators, affective engagement (liking for learning) got the highest mean score of 4.25 ( $\sigma$ =0.76), described



as Very High. Next is the affective engagement (liking for school) with a mean score of 4.20 ( $\sigma$ =0.80), also described as Very High, followed by behavioral engagement (effort and persistence) with a mean score of 4.05 ( $\sigma$ =0.79), described as High. Then, cognitive engagement got second to the lowest, with a mean score

of 4.02 ( $\sigma$ =0.85) but still described as High. Lastly, behavioral engagement (extracurricular activities) got the lowest mean score of 3.37 ( $\sigma$  =1.04), described as Moderate, meaning that all five indicators are oftentimes manifested among the respondents.

| Indicators         Mean         Standard Deviation         Descriptive Equivalent |      |                    |                        |  |
|---|------|--------------------|------------------------|--|
| Indicators  | Mean | Standard Deviation | Descriptive Equivalent |  |
| Affective engagement  | 4.25 | 0.76               | Very High              |  |
| (liking for learning)   |      |                    |                        |  |
| Affective engagement  | 4.20 | 0.80               | Very High              |  |
| (liking for school)   |      |                    |                        |  |
| Behavioral engagement   | 4.05 | 0.79               | High                   |  |
| (effort and persistence)  |      |                    |                        |  |
| Behavioral engagement   | 3.37 | 1.04               | Moderate               |  |
| (extracurricular activities)  |      |                    |                        |  |
| Cognițive engagement  | 4.02 | 0.85               | High                   |  |
| Over-all result   | 3.91 | 1.11               | High                   |  |

## Table 1. Level of Student Engagement

This finding indicates the level of students' engagement affectively, behaviorally, and cognitively in their academic endeavors. This finding can be further explained by the ideas of Elivahu (87), who believed that to maximize student engagement, a teacher must design a multifaceted nature of cognitive involvement, emotional connection, and behavioral affliction with the learning content. The result revealed that the respondents have a strong desire to learn and that they find enjoyment in learning. Notably, they are motivated enough to go and perform well in school, and they are also actively involved in trying to learn beyond what they expect. Significantly, it was also strengthened by Bender (1) that student engagement is essential for students' learning: students need to be more engaged with the content to be mastered to learn it. However, student engagement is not a targeted or direct goal of education. However, engagement is most frequently discussed as a precursor and essential cause for increased student achievement.

On the contrary, the result showed that they lack motivation to actively participate in extracurricular activities because of a lack of interest in non-academic activities; the result is moderate, which is interpreted as sometimes manifested. The findings revealed they need to be more actively participative towards school events like sports day, school picnics, parent day, and other extracurricular activities. Accordingly, Munir and Zaheer (242) emphasized that participation in extracurricular activities is linked to positive academic outcomes, such as students' grades and educational aspirations, improved attendance, pro-social behaviors, and more positive development generally. Through extracurricular activities, students' employability or work skills can be enhanced. Moreover, they found that students who participate in extracurricular activities rate their creativity, communication skills, leadership, and self-promotion skills higher than their fellow students who do not participate in ECAs. Aoyagi et al. (624) studied the factors that motivate students to participate in various ECAs. Among different factors, the prominent ones were the sense of responsibility and continuity, the spirit of challenge, and advancement. Among the barriers that demotivate an individual from participating in extracurricular activities are limited participants, failure to properly organize activities, and lack of support from the institution, community, partner departments, and other students (Fujii et al. 1135).

## Level of Public Speaking Class Anxiety

Shown in Table 2 are the results of the descriptive statistics on assessing the level of public speaking class anxiety, which has an overall mean of 3.28 ( $\sigma = 1.03$ ), described as moderate. This means that public speaking class anxiety is sometimes manifested among the respondents. Among the three indicators, foreign language classroom anxiety got the highest mean score with 3.36 ( $\sigma = 1.04$ ), described as moderate only. It is followed by a personal report of public speaking anxiety



with a mean score of 3.24 ( $\sigma = 1.02$ ), described as moderate. Meanwhile, the indicator with the lowest mean score is the personal report of communication of apprehension, with a mean score of 3.13 ( $\sigma = 1.01$ ), also described as moderate.

| Indicators                                 | Mean | Standard  | <b>Descriptive Equivalent</b> |
|--|------|-----------|-------------------------------|
|  |      | Deviation |                               |
| Foreign language classroom anxiety         | 3.36 | 1.04      | Moderate                      |
| Personal report of communication           | 3.13 | 1.01      | Moderate                      |
| apprehension                               |      |           |                               |
| Personal report of public speaking anxiety | 3.24 | 1.02      | Moderate                      |
| Over-all result                            | 3.28 | 1.03      | Moderate                      |

The results imply that the respondents are moderately experiencing foreign language classroom anxiety, communication apprehension, and public speaking anxiety. This means that the respondents could be more confident speaking in public using English. Foreign language classroom anxiety as the indicator with the highest mean score implies that the level of respondents' apprehension is moderate; they are somehow unsure of themselves while speaking in English. The motivation that they feel whenever they are called to speak in English could be more assertive. On the other hand, personal report of communication of apprehension as the indicator with the lowest mean score further supports the results as to why these respondents are having apprehension with the anticipation of being called upon. Therefore the statement of Shamsuddin et al. (63) should not be overlooked that the problem in conquering students speaking anxiety should not be narrowed down to the notion of public speaking alone but should be glanced at in a broader context. The result agrees with the findings of Indriani and Sugivati (57) that 58.8% of students experienced a medium level of public speaking anxiety.

In the same manner, in the study of Ong and Zambas (55), the findings revealed that students were not given various opportunities to talk where teachers should design meaningful communicative tasks to reduce public speaking anxiety levels, encourage enough class interaction, and place high regard for class mentoring. Furthermore, Arnold (1) mentioned several ways to reduce PSA, including cognitive-behavioral therapies, exposure therapies, skills training, and others. Furthermore, Horwitz et al. (125) stated that in other situations, not only those non-performer students have anxiety. Many of them claim to experience mental blocks though these people may be good learners, strongly motivated, and have a positive outlook toward the target language. Therefore this anxiety reaction impedes their ability to perform successfully in a foreign language class. This implies that public speaking anxiety is prevalent among learners regardless of their state or trait.

# Level of School Culture

The descriptive statistics for assessing a school's culture level are displayed in Table 3, with an aggregate mean of 4.05 (=0.80), which is characterized as high. This means that the school culture is oftentimes manifested by the respondents in the institution they are enrolled in.

Among the three indicators, affiliative collegiality got the highest mean score of 4.10 ( $\sigma = 0.79$ ), described as high. It is followed by a professional collaboration with a mean score of 4.03 ( $\sigma = 0.81$ ), described as high. Last on the list is self-determination, with the lowest mean score of 4.01 ( $\sigma = 0.80$ ) but still described as high.

| Indicators     Mean     Standard     Descriptive |      |           |            |  |
|--|------|-----------|------------|--|
|  |      | Deviation | Equivalent |  |
| Professional Collaboration                       | 4.03 | 0.81      | High       |  |
| Affiliative Collegiality                         | 4.10 | 0.79      | High       |  |

Table 3. Level of School Culture



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| Self-determination/efficacy | 4.01 | 0.80 | High |
|-----------------------------|------|------|------|
| Over-all result             | 4.05 | 0.80 | High |

This resonates with the idea of Amsalu (190) that the performance of educational institutions could be determined by the nature of school culture, including quality administration, the commitment of teachers, and students' motivation for their learning endeavors. Students' involvement with activities and conditions is likely to generate high-quality learning (Coate 7). Moreover, Melese and Molla (190) emphasized that the statistical significance of the contribution of the school culture to students' academic achievement implies that the support system provided by the teacher and other

responsible bodies was seen as effective. Therefore, school culture is seen as a tool for successful academic endeavors.

## Correlation between Student Engagement, Public Speaking Class Anxiety, and School Culture

Displayed in Table 4 are the results of the relationship between the independent (student engagement), dependent (public speaking class anxiety), and mediator (school culture) variables.

| Pair      | Variables                 | Correlation | p-value | Decision |
|-----------|---------------------------|-------------|---------|----------|
|           |                           | Coefficient |         |          |
| IV and DV | Student engagement and    | .479**      | 0.000   | Reject   |
|           | public speaking class     |             |         |          |
|           | anxiety                   |             |         |          |
| IV and MV | Student Engagement and    | .642**      | 0.000   | Reject   |
|           | school culture            |             |         |          |
| MV and DV | School Culture and public | .354**      | 0.000   | Reject   |
|           | speaking class anxiety    |             |         |          |
|           |                           |             |         |          |

# D.1. Correlation Analysis of the Variables

Bivariate correlation analysis using Pearson productmoment correlation was used to determine the relationship between the mentioned variables.

The first zero-ordered correlation analysis between student engagement and public speaking class anxiety revealed a computed r-value of 0.479 with a probability value of p<0.000, which is significant at the 0.05 level of significance. This indicates a positive and strong association between the two variables. Thus, the null hypothesis of no significant relationship is therefore rejected.

In the same manner, the second bivariate correlation analysis involving student engagement and school culture yielded an r-value of 0.642 with a probability value of p<0.000, which is significant at the 0.05 level of significance.

This indicates that there exists a positive and strong association between the two variables. Thus, the null hypothesis of no significant relationship is therefore rejected. The third correlational analysis of school culture and public speaking class anxiety yielded an r-value of 0.354 at a significance level of 0.05. This suggests a positive and strong association between the two variables. Thus, the null hypothesis of no significant relationship is therefore rejected.

In the same manner, student engagement positively and significantly relates to school culture. This implies that the school culture significantly impacts students' active involvement.

The affective, behavioral, and cognitive involvement of the students towards the nature of the school's implementation of programs, curriculum, and school values reinforces positive outcomes. Henceforth, this agrees with the findings revealed by Khan (71) that student engagement has a significant relationship with school culture. According to the findings, school heads should build and encourage school culture to improve student engagement at school. Via shared vision and professional values, school culture allows students to share their expertise in a collaborative and collegial environment.



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Along with this, the idea is parallel with Amsalu (191) clearly expressed that the outcomes of school have a strong relationship with the nature of school culture, specifically transcending the visions, missions, and values emanating from existing policies, rules, and regulations of the governing bodies, and constant communication among stakeholders and students' engagement during the implementation process is very vital in achieving a particular goal. Therefore, an active engagement of the students in implementing the schools' designed policies can bring outstanding results.

Lastly, school culture significantly correlates with public speaking class anxiety. This implies that the school culture is significantly related to public speaking anxiety. This means that when students don't feel a positive environment where it clearly collaborates the values it upholds, that is basically focused on the institutions' manifested culture towards the process of learners' skills, specifically if the developing institutions' cultivation has a direct influence on the learners speaking skills development. Significantly, it agrees with the suggestion on how to treat and reduce PSA -which are not limited to cognitive-behavioral remedies, exposure activities, and skills training engagement, which narrows down how the institution constructs and implements such necessary programs (Arnold 21).

In the same manner, it was strengthened by the idea that speech anxiety is an issue that persists in public speaking, and it is innumerably manifested in schools that if a teacher support staff and learners fail to uphold their communicated curriculum as well as lack of preparation from possible difficulties, sudden changes for curriculum, lesson plans, programs, and activities where speaking is involved could certainly affect students who are learning English either as their second language or as a foreign language (Harutunian, 2). This also resonates with the findings of Marinho et al. (4), who revealed that 63.9% of college students reported fear of public speaking and that as many as 89.3% of the students would like their undergraduate program to include classes to improve public speaking.

## Mediation Analysis of the Three Variables

Data were analyzed with the linear regression method as input to the red graph. Mediation analysis developed by Baron and Kenny is the mediating effect of a third variable in the relationship between two variables.

There are four steps to be met for a third variable to be acting as a mediator. In Table 5, these are categorized as steps 1 to 4. In step 1, student engagement as the independent variable (IV) significantly predicts public speaking class anxiety, which is the dependent variable (DV) of the study. In step 2, student engagement significantly predicts public speaking class anxiety, the mediator (M). In step 3, school culture significantly predicts public speaking class anxiety.

Since the three steps (paths a, b, and c) are significant, further mediation analysis through the red graph is warranted, involving the Sobel z test to gauge the significance of the mediation effect. If the effect of the independent variable on the dependent variable becomes non-significant at the final step of the analysis, full mediation will be achieved. It means the mediator variable mediates all the effects. In addition, if the regression coefficient is substantially reduced at the final step but remains significant, only partial mediation is obtained, which implies that part of the independent variable (metacognitive awareness of the reading strategies) is mediated by the mediator (beliefs about language learning), but other parts are either direct or mediated by other variables that are not included in the model. In this case, as gleaned in step 4 (denoted as c'), the effect of student engagement on public speaking class anxiety was even found to increase after being mediated by school culture. With this, partial mediation took place since the effect was found to be significant at p<0.05 level.

| 2 | Doth                | Data (Unstandardized)                  | Stondard Ennon         | Data (Standardized)   |
|---|---------------------|--|------------------------|-----------------------|
|   | Table 5. Regression | results of the variables in the four c | riteria of the presenc | e of mediating effect |

| Step   | Path | Beta (Unstandardized) | Standard Error | Beta (Standardized) |
|--------|------|-----------------------|----------------|---------------------|
| Step 1 | с    | .774                  | .074           | .479                |
| Step 2 | a    | .705                  | .046           | .642                |
| Step 3 | b    | .112                  | .087           | .079                |
| Step 4 | c'   | .665                  | .096           | .428                |

. . . . .

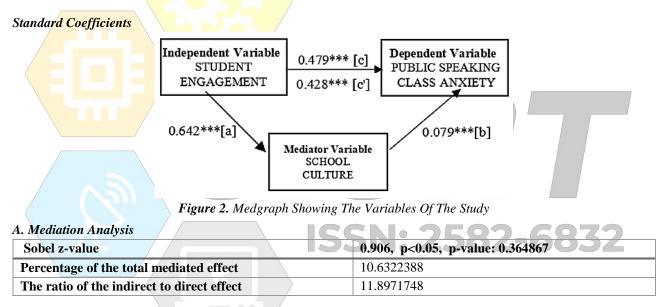


Furthermore, the result of the computation of mediating effects is shown in Figure 2. The Sobel test yielded a z-value of 0.906 with a p-value of 0.364867, which is significant at 0.05. This means that mediating effect is partial, such that the original direct effect of student engagement on public speaking class anxiety improved with the addition of school culture. The positive value of Sobel z indicates that the addition of school culture does reduce and somewhat decreases the effect of student engagement and public speaking class anxiety.

The figure also displays the results of the effect size calculation for the mediation test between the three variables. The effect size measures how much of the effect of student engagement can be attributed to the indirect path. The total effect value of 0.744 is the beta of student engagement and public speaking class

anxiety. The direct effect value of 0.665 is the beta of school culture towards student engagement, and public speaking class anxiety was included in the regression. The indirect effect value of 0.079 is the amount of the original beta between the student engagement and public speaking class anxiety that now goes through school culture to public speaking class anxiety (a \* b, where "a" refers to the path between IV and DV and "b" refers to the path between MV and DV).

The ratio index is computed by dividing the indirect effect by the total effect; in this case, 0.079 by 0.744 equals 0.106. It seems that about 10.63 percent of the total effect of student engagement and public speaking class anxiety through school culture, and about 76.6 percent of the total effect is either direct or mediated by other variables not included in the model.



**B.** Effect Size Measures (Unstandardized Coefficients)

| Total:       | 0.744 |
|--------------|-------|
| Direct:      | 0.665 |
| Indirect:    | 0.079 |
| Ratio Index: | 0.106 |

Moreover, according to the result mentioned, student engagement significantly mediates school culture. Students are highly enthusiastic about engaging with school practices to bring about learning success. Besides, Bayar and Karaduman (99) pointed out that school culture has a strong effect on students' achievement, performance, sense of competition, and motivation. With this, the respondents offered some suggestions like an increase in the number of social activities organizations to encourage them to actively participate and make contributions, active use of laboratories for high engagement undertake, and positive relations between teachers and students for building a positive environment. Furthermore, Daoud and Hudley (187) explicate that student engagement and school culture have a continuing transactional relationship. Thus, perceived teacher support and cultural compatibility are essential in building



motivation for students' active engagement. Empirically, student engagement has been found to be responsive to contextual factors such as school environment and beliefs (Tomaszewski et al., np). School culture does play a part in affecting students' performance. Schools can create a culture where students become more motivated and engaged in performing well academically (Sowid 3).

Lastly, school culture significantly mediates public speaking class anxiety. Thus, this concurs with the conclusion of Kamridah et al. (1661) that it is indeed significant for a school to provide training to create a competent speaker; hence, a systematic learning approach was effective in fostering competence in public speaking performance in a foreign language. This strengthens the idea that a student can learn best if the school is conducive to learning and if it supports the learning goal of its students. To further clarify the context, public speaking anxiety is distinguished from state anxiety, which typically occurs when a person receives a potentially threatening stimulus (Lestari et al. 76). Perhaps if the students do not feel supported in their endeavor to be communicatively competent by not providing various opportunities for them to ameliorate their public speaking anxiety and lack of effective planning and implementation could probably cause retaliation on how they cope their apprehension in speaking in public.

This also resonates with the findings of Marinho et al. (4), who revealed that 63.9% of college students reported fear of public speaking and that as many as 89.3% of the students would like their undergraduate program to include classes to improve public speaking. Likewise, Plandano et al. (1446) made a resounding recommendation that public speaking should be offered as a subject to all degree programs at the tertiary level, especially for teacher education programs.

## CONCLUSION

With consideration of the findings of the study, conclusions were drawn in this section. The first-year college students of selected tertiary schools in Panabo City, Davao del Norte, perceived high levels of student engagement and school culture while moderate levels of public speaking class anxiety. The results also confirm that there is a significant relationship between student engagement and public speaking class anxiety among first-year college students in selected tertiary schools in Panabo City, Davao del Norte. In the same manner, there is a significant relationship between student engagement and school culture among the respondents. Similarly, the findings also showed that there is a significant relationship between school culture and public speaking class anxiety among the said respondents. Moreover, the results of the study also suggest that school culture mediates the relationship between student engagement and public speaking class anxiety.

The mediation analysis reveals that school culture partially mediated the relationship between student engagement and public speaking class anxiety. The partial mediation could not claim that school culture is the reason why student engagement can influence the public speaking class anxiety of first-year college students among selected schools in Panabo City, Davao del Norte. The study indicates that school culture can partly explain how student engagement can affect public speaking class anxiety.

Moreover, the result substantiated the Conditioning Theory used by Hoffman et al. (1995), which was formulated by Rachman (1976, 1977), following the footsteps of Watson (1924) and Mowrer (1939), Inferring that anxiety is a conditioned response (CR) induced by a conditioned stimulus (CS). In light of Rachman postulated two pathways to anxiety: Direct conditioning (a neutral stimulus is paired with an aversive unconditioned stimulus (UCS) and becomes a CS) and indirect conditioning (which includes vicarious and informational learning). As Barlow (1988) hypothesized that direct conditioning from two kinds of aversive UCS is possible: a "false alarm" (a panic attack) and a "true alarm" (an external traumatic situation). Either can become associated with internal (student engagement) or external (school culture) stimuli, which then become "learned alarms" or CSs.

## RECOMMENDATIONS

The study found a significant relationship between student engagement and public speaking class anxiety among first-year college students in selected tertiary schools in Panabo City, Davao del Norte. The researcher, therefore, recommends that students maintain and enhance active engagement towards school activities effectively, behaviorally, and cognitively especially which provides communication skills enhancement. The students must also intensify active participation in extracurricular activities to help





invigorate their self-esteem and boost their confidence in social skills and public relations, which is beneficial in controlling anxieties about speaking in public.

The study also reveals a significant relationship between student engagement and school culture among the respondents. Thus, the researcher recommends that the faculty and staff persevere with frequent effective communication opportunities for professional collaboration, affiliative collegiality, and selfdetermination and efficacy to vitalize students in partaking in school activities vigorously. Moreover, the school must reinforce the effective implementation of extracurricular activities to instigate motivation for students' active engagement.

Furthermore, the study revealed a significant correlation between school culture and public speaking class anxiety among the aforementioned respondents. The researcher recommends that the faculty and staff must design a curriculum that could enhance their capability to speak in public. In addition, it will be advantageous for the school to cultivate highly capable and competent students, particularly in the area of public speaking, by incorporating communication activities strategies into students' day-to-day academic and non-academic engagements to help them overcome speaking anxiety and develop self-confidence.

Since the study also revealed that school culture significantly mediates the relationship between student engagement and public speaking class anxiety, it is recommended that the faculty and school administrators implement and design programs and activities that can help students sustain or intensify students' engagement in communication competency and reduce public speaking anxiety. Both curricular and non-curricular activities must be planned and implemented rigorously so that students will not lose their enthusiasm in keeping active involvement with school activities. Consequently, they may gain confidence in delivering public speeches, which may aid them in their academic and extracurricular endeavors.

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