Effects of Self-Talk on Performance Anxiety

De Guzman, Francine Georgina DdR.
Ocampo, Rodelando

The current research delved into knowing the effects of self-talk on performance anxiety; as an intervention in decreasing the said performance anxiety. Using the small n within-subjects experimental design, the researcher engaged the participation of 15 students from a college in Muntinlupa, male and female, aged 19-30 years old, who were chosen through purposive sampling technique using a piloted performance anxiety checklist. Findings exhibit that the computed t-value, \( t(14) = 11.48, p < 0.01 \) was significant, when compared to the tabular t-value of 1.77 at \( \alpha = 0.01 \) level of significance. Given these data, the implication that the Self-Talk had an effect in decreasing the stage fright of subjects is present.

Key Words: Self-Talk, Performance Anxiety, Stage fright

It is unavoidable that there will be situations in which one would have to speak in public, or in front of an audience. For instance, in school; there would be times that the teacher would require students to give reports on certain topics in front of the class. In the business world, there would also be occasions where one would have to speak in front of co-workers for proposals. For some, speaking in front of an audience, or even the thought of an audience makes them uneasy, or anxious.

The fear that is elicited by stage fright ignites the body’s fight-or-flight response that is brought about by a perceived sense of danger. Added to that, performance anxiety could negatively affect a person’s self-esteem and self-confidence. Corresponding to Kageyama (2006), stage fright is common amongst professional musicians. He says that 96% of the orchestra musicians admit to anxiety before performances, according to one survey. In another survey done of 48 ICSOM orchestras, 1 out of every 4 musicians concur that stage fright was a problem for them. The significance of solving this problem is high because it can prevent an individual from doing what one usually enjoys, and it could also affect a person’s daily routines, and eventually, one’s career.

Based on a research done by Priyamvada, et al. (2009), an approach to alleviate unfavorable temperament such as stage fright is called the Systematic Desensitization. Findings prove that said intervention helped decrease the participant’s anxiety. Another is the Alexander Technique, which is a psycho-physical method, as stated by Klein, Bayard, & Wolf (2014), that “helps to release unnecessary muscle tension and re-educates non-beneficial movement patterns through intentional inhibition of unwanted habitual behaviours.” Researchers conclude that Alexander Technique sessions may improve performance anxiety in musicians, as evidenced from the trials done. A third technique is Hypnotherapy. Results from a study done by Stanton (1994) imply that hypnotherapy may be an operational treatment for music performance anxiety (as cited by Kenny, 2006).

Self-Talk

Research has shown that a helpful way to ease one’s negative disposition, such as anxiety, is through self-talk. Self-Talk, as defined by Hackfort & Schwenkmezger (1993), is the “dialogue [through which] the individual interprets feelings and perceptions, regulates and changes evaluations and convictions, and gives him/herself instructions and reinforcement” (as cited by Hardy, 2006). In the span of an eleven-year period, there have been various studies regarding this approach. Hardy, Hall, Gibbs, & Greenslade’s (2005) study indicated that both self-talk dimensions were positively related to self-efficacy, self-efficacy was positively associated with performance, but neither self-talk dimension was related to performance. Hardy, Hall, & Hardy (2005) also did a research on quantifying athlete self-talk. Findings suggest that the content of athlete self-talk was generally positive, covert and abbreviated. Neck & Houghton’s (2006) findings show that the three-dimensional scale of self-leadership skills is positively associated with both self and supervisor ratings of innovative behaviors. This suggests that the importance of building up self-leaders who can successfully meet the required expectations and standards of innovative behavior is needed for organizations that pursue ways in which to cultivate innovative behaviors in their employees. With regards to Hatzigeorgiadis, et al.’s (2009) research, findings presented suggest that self-talk can cause improvement for self-confidence and reduction for cognitive anxiety. Results
obtained from Tod, Hardy, & Oliver’s (2011) mediation-based analysis suggest that cognitive and behavioural factors had the most consistent relationships with self-talk.

Preponderant of the studies presented on self-talk are pertinent in the business or industrial field, although there are studies that focus more on the field of sports, and a few on constructs that are related to psychology. Researches also consisted of literature reviews in order to provide a better comprehension of the self-talk construct. A few experimental investigations were conducted, although one of which did not answer their original research question, which implies a conflict in data, and one of which investigated the underlying mechanisms that support the self-talk and performance relationship, with regards to self-confidence and cognitive anxiety. Majority of the analyses described employed athletes that play various sports as their subjects. Studies germane to the psychological field were not adequately represented.

Performance Anxiety
Stage fright is an emotional and physical response that is triggered in some people when they need to perform in front of an audience - or even an anticipated or perceived audience, such as standing in front of a camera (as cited by Dvorsky, 2012). There have been several studies done on the subject of performance anxiety, or the construct that is also known as stage fright. The findings of Argo, Dahl, & Manchanda (2005) yielded that social size manipulation was successful. Although the results for the two behavioural methods did not support their first hypothesis. Results for the study of Meijer & Oostdam (2007) presented partial support for the stage-fright hypothesis. The effect of instructional content was ambiguous. The second study, accomplished by Studer, et al. (2011) indicated that one-third of the students experienced stage fright as a problem and that it only had a moderate correlation to music performance anxiety. Another research done by Hildebrandt, Nibling, & Candia (2012) concluded that more research is needed and that attempts should be made to minimize the stress level of the students, along with improving their ability to cope with stress, and otherwise reduce the risk for injury. Two of the studies utilized the experimental research design, the third study used the survey to gather data, as well as the fourth study, which used a longitudinal study. It can be seen that none of the studies delineated a technique to ease performance anxiety. Also, none of the studies cited were done in the Philippine setting.

The rationale for solving this problem, according to Erikson’s Post-Freudian theory in Stage 6, is in order to be able to develop secure intimate relationships, one must first have a strong sense of personal identity. Erikson further states that this stage is marked with the psychosocial crisis of intimacy versus isolation (Feist & Feist, 2009). Successful resolution of this stage would result in love, the basic strength of the young adulthood stage, and would be distinctive of the ability to form lasting and meaningful relationships with other people.

Synthesis
In the studies that have been done in the last eleven-year period, the researcher has gathered four on Performance Anxiety, and seven done with Self-Talk as the main variable of research. For the first study regarding performance anxiety, researchers manipulated the social size, and results yielded this action as successful. Meijer & Oostdam’s (2007) findings presented partial support for the stage-fright hypothesis; impact of stressful instruction revealed to be vague. Two other studies on this phenomenon also conclude that stage fright or performance anxiety does exist as a problem. To achieve results, researchers used the experimental design. With the studies on self-talk as intervention, as previously stated, most of the studies have relevance in the industrial field albeit some are more apropos in the field of sports. Unlike with the researches on performance anxiety, longitudinal experimental designs were not used in order to gather data; instead, the most common method was the literature review. Majority of the studies utilized the experimental method, which was not depicted sufficiently, with regards to implications for the psychological field, for instance (especially in the Philippine setting); also, none explored the reduction of performance anxiety using therapeutic techniques, such as self-talk exercises. Thus, this study aims to determine the level of subjects’ performance anxiety. Further, this research also sought to ascertain the effects of Self-Talk on Performance Anxiety of subjects.

Method
Research Design
The researcher used the small n: within-subjects experimental research design, utilizing the pretest-posttest design. This is where each subject serve in more than one condition of the experiment (Myers & Hansen,
Quantitative research gathered the numerical data and used the said data to make a conclusion or explanation regarding a phenomenon or concept (Mujis, 2010). Hence, this was the most appropriate design to be used for it determines the effect of Self-Talk on the Performance Anxiety of the same subjects, thus maintaining the homogeneity of the group.

**Participants**

The researcher decided on 15 subjects for experimentation. The desired participants were those individuals who were in their young adulthood stage, aged 19-30 (Feist & Feist, 2009) who exhibited a significantly high level of performance anxiety. The study disregarded gender, socio-economic status of the family, employment status, civil status, educational attainment, religion, etc. With these, the researcher used a non-random purposive sampling technique, due to the criteria previously enumerated.

**Instruments**

For the screening of the subjects to be used for the study, the researcher piloted an *11-item checklist for Performance Anxiety*, based on the facts stated in the literature on the physiological symptoms that were researched. The purpose of the checklist was to first assess whether subjects could participate in the study. The checklist underwent validation by 3 experts in the Psychological field and laymen with the same status in life. Computed reliability for the piloted checklist is at $\alpha = .831$. The standardized *Beck Anxiety Inventory* was used as a tool for the pre-test and post-test assessment of subjects. Computed reliability is at $\alpha = .92$ for internal consistency while test-retest reliability (1 week) is 0.75 (Beck, Epstein, Brown, & Steer, 1988). This was scored using the following interpretation that was provided:

- If the individual’s score is 0-21, the level of anxiety is low; if the score is 22-35, the subject has a moderate level of anxiety; scores of 36 and above imply high levels, which also suggest potentially concerning levels of anxiety. This 21-item scale was used to establish a baseline anxiety level, as well as a post-treatment outcome measure. After confirming that their eligibility, subjects then underwent experimentation.

As intervention, the researcher utilized Self-Talk for the subjects. For this, the researcher used the exercises from the “*Anxiety & Phobia Workbook,*” Fifth Edition, by Edmund J. Bourne as reference.

To determine whether the subjects had a significant level of anxiety or not, the researcher referred to the following scoring for the Performance Anxiety Checklist:

- If the subject’s score is 10 and below, the level of anxiety is low; if the score is 11-21, the subject has a mild level of anxiety; 22-32 indicates an average level of anxiety while 33-43 suggests a high level of anxiety, and a score of 44 and above signifies a very high level of anxiety.

**Procedures**

First, the researcher looked for individuals who fit the criteria previously listed. After confirming their eligibility, they were considered as candidates for subjects for the experiment. To begin, 28 individuals were given the Performance Anxiety checklist to determine their qualification for the experiment, and to assess them for performance anxiety. After which, the test was interpreted to establish if subjects had a significant level of performance anxiety or not. For the individuals who will be subjects for the experiment, they were scheduled for experimentation. They were also asked to complete the *Beck Anxiety Inventory (BAI)*.

In the experimentation, proper, the selected subjects were handed Informed Consent letters, to ensure their understanding of the research objectives, and their willingness to be in the experiment. In the Pre-test portion of the experiment, subjects were asked to answer the BAI. The researcher then administered the intervention, Self-Talk to the subjects. This was accomplished by the researcher through a discussion with the subjects regarding Self-Talk, and educating them on how to do it before they perform, based on Bourne’s book. After which, the subjects were asked to perform a prepared speech, the *Gettysburg Address*. The speech took
less than 5 minutes. In the final portion, they were then asked to answer the Inventory again, in order to determine the effect of the intervention to the performance anxiety of the subjects. The experiment was conducted in the Psychology Laboratory of the College of Arts and Sciences in San Beda College Alabang, to control, as much as possible, the extraneous variables.

**Statistical Analysis**

*Mean.* This statistical tool was used to analyze and interpret the data gathered from the experiment that was conducted because it identified the prevalent performance anxiety level of the subjects.

*Dependent T-test.* This statistical tool was used to determine if there were any significant effects, or differences between the two means. For the current study, the *Dependent T-test* was used to establish whether the Self-Talk exercises had an effect on the Performance Anxiety of the subjects.

**Results and Discussion**

*Research Question #1:* What is the subjects’ level of Performance Anxiety before and after Self-Talk?

**Table 1. Subjects’ Level of Performance Anxiety**

<table>
<thead>
<tr>
<th></th>
<th>(\bar{x})</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRETEST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Anxiety</td>
<td>37.67</td>
<td>10.61</td>
<td>High level of anxiety</td>
</tr>
<tr>
<td><strong>POSTTEST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Anxiety</td>
<td>12.33</td>
<td>7.88</td>
<td>Low level of anxiety</td>
</tr>
</tbody>
</table>

Table 1 presents the level of performance anxiety obtained from the Beck Anxiety Inventory for both pre-test and post-test conditions. It shows that subjects attained a high mean score of 37.67, and an SD having the value of 10.61 for the pre-test results. This means that prior to the application of the intervention, subjects had a difficult time easing their nervousness; the thought of speaking publicly made them apprehensive. Subject to the mean score, the results indicate that subjects demonstrated a high level of performance anxiety. In contrast, the mean score is 12.33 for the post-test results. An SD score of 7.88 is also achieved by the individuals. Subjects exhibited a low level of performance anxiety, as implied by the mean score. After the application of the Self-Talk, it was easier for the subjects to start their speech smoothly. Moreover, the stage fright of subjects decreased. Comparing the pre-test and post-test results of the experiment, it is evident that the mean scores in the post-test (\(M = 12.33\)) is lower than the pre-test mean score (\(M = 37.67\)). The same can be said for the SD scores of both assessments.

*Research Question #2:* What are the effects of Self-Talk to the Performance Anxiety of Subjects?

**Table 2. Effect of Self-Talk to the Performance Anxiety of Subjects**

<table>
<thead>
<tr>
<th></th>
<th>(\bar{x}_1)</th>
<th>(\bar{x}_2)</th>
<th>(\bar{x}) difference</th>
<th>df</th>
<th>Computed t-Value</th>
<th>Tabular t-Value</th>
<th>p-Value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Beck Anxiety Inventory</em></td>
<td>67</td>
<td>12.33</td>
<td>-25.34</td>
<td>14</td>
<td>11.48</td>
<td>1.77</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 2 presents the computed t-value and tabular t-value for both pre-test and post-test assessment. It shows results pertaining to the effect of self-talk to the performance anxiety of subjects. \(\bar{x}_1\) indicates the mean
score for the Beck Anxiety Inventory in the pre-test part of the experiment (M = 37.67), while \( \bar{X}_2 \) expresses the mean score for the post-test (M = 12.33). A mean difference of -25.34 resulted in implying that the degree of the subjects’ performance anxiety decreased. Computed t-value is at \( t(14) = 11.48, p < 0.01 \). This was interpreted as significant, when compared to its tabular t-value of 1.77 at \( \alpha = 0.01 \) level of significance.

The results for the dependent-samples t-test was, as mentioned, significant at \( t(14) = 11.48, p < 0.01 \). Given the results, it is implied that Self-Talk had a significant effect in lessening the stage fright that subjects felt before public speaking. This result was supported by the research done by Hatzigeorgiadis, et al. (2009), wherein their findings state that self-talk can decrease the cognitive anxiety, and at the same time, reinforce the self-confidence. The reason for this is because, according to Johnson, Hrycaiko, Johnson, and Hallas (2004), focusing on the desired thought leads to the desired is the core of self-talk (as cited by Hatzigeorgiadis, et al., 2009). Zinsser, et al. (2010) and Theodorakis, et al. (2000) both conducted investigations on the effectivity of self-talk as treatment for anxiety. Results from both validate the current researcher’s data, indicating that self-talk is an effective approach in decreasing stage fright of individuals (as cited by Tod, Hardy, & Oliver, 2011). Subjects had an easier time delivering the speech after the intervention was applied.

Conclusions and Recommendations

Conclusively, the study shows that subjects obtained a high mean score from the Beck Anxiety Inventory in the pre-test assessment of the experiment, which entails a high level of anxiety; results in the post-test condition present that subjects’ degree of stage fright decreased, based on the mean score gained. Furthermore, results for computed t-value were found to be significant when compared to the tabular t-value. The findings present a statistically significant result, denoting that the intervention had a significant effect in decreasing the stage fright of subjects. From these, it can be seen that subjects were more secure and composed to speak publicly after the administration of Self-Talk. Public speaking is a vital skill that one has to have, especially when an individual is already working, as it is a form of communication. When a speech is delivered favourably, it could help us to share our ideas and influence decisions, as well as form connections. It could also be beneficial in inspiring people and motivating change. Not only that, it is a means to inform people. Given the results of the study, the possible implication of this to society is that it will be easier to cope with one’s stage fright with Self-Talk.

For the development of this study, a further in-depth research is recommended to engage more subjects among other types of individuals (of different ages) and to ascertain other psychological, non-therapeutic techniques on ways to overcome or reduce anxiety. Future researchers may also consider studying whether there are factors/predictors to performance anxiety, and what these are. Whether these factors have any correlation to the reason why the intervention worked is another point to study. Criteria in choosing the subjects may also be altered.

REFERENCES


