Will an Individual’s Performance Be Affected by Audience Expectations?

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ABSTRACT
This study addresses the effects of audience expectations on an individual’s performance. It was proposed that individuals who perceive low expectations from the audience will perform better than those who perceive high expectations or who are working alone without an audience. We also hypothesized that participants performing alone would perform better than those who perceived high audience expectations. To test these hypotheses, 30 subjects participated in an experiment where they were asked to work on two rounds of an anagram test. The presence of an audience holding high and low expectations was replaced by the presence of a video camera. The results partially supported the hypothesis. Individuals in the low-expectation condition performed better than those in the alone condition. However, there were no significant differences between the low-expectation and high-expectation conditions and the alone and high-expectation conditions. These findings indicate that the presence of an audience might encourage a person to perform better and that the perception of an audience with low expectations might push individuals to further excellence.

Keywords: audience expectation, self-efficacy, social facilitation.

1. INTRODUCTION

Individuals often improve their performance when carrying out tasks if other people are present, a phenomenon known as social facilitation (Carver et al., 1981; Guerin & Innes, 2009; Kassin, Feinn, & Markus, 2011). Triplett (1898) first noticed this phenomenon in an experiment with children riding on bicycles; he found that children pedaled their bikes faster when they rode beside another child than when they road alone.

Yet, the presence of other people does not always lead to performance improvement. Zajonc (1965) found that the presence of other individuals has a physiological arousal through activation of the endocrine system. Social facilitation also depends on task difficulty: an easy task often leads to performance enhancement while a difficult task leads to performance impairment. Blascovich et al. (1999) studied how individuals perform when they know they are being evaluated by an audience. In these environments, easy tasks typically lead an individual to expect positive feedback and will push them to master the task. But fear of embarrassment leads individuals to perform more poorly on difficult tasks (Sanna & Shotland, 1990). The perception of an attentive audience also influences the
individual to anticipate positive feedback and perform better (Botto & Rochat, 2018). Conversely, the researchers induced a worse performance in individuals who faced an inattentive audience. The perceived social status of the audience also influences an individual’s performance. Klein et al. (2019) found that the higher the status of the audience, the more anxiety the individual felt while waiting for positive feedback. However, the perceived high-status audience induced a higher commitment to a goal and a better performance.

Audience evaluation may also shape an individual's belief of their own capabilities, a concept called self-efficacy, defined as one's belief that he or she can achieve a targeted level of performance (Kassin, Fein, & Markus, 2011). A study by Sanna and Shotland (1990) found that the audience evaluation of one task affects the individual’s performance on the next task. Participants who believe that they had performed well expect to earn a positive evaluation and then score higher on a subsequent performance test. On the other hand, a person can have a performance decline if they believe they have received an unsatisfactory review in a previous performance. Rewards can also motivate performance and an individual’s self-expectations (Carmeli & Schaubroeck, 2007); however, a higher hope for a good outcome also creates more insecurities that the task will not be performed well.

Sanna (1992) used a connect-the-dots task to study self-efficacy. The participants were simply told whether they had been successful or unsuccessful in passing the test. There were three conditions: alone, collective, and coaction. Participants in the alone group worked in a room while the researcher set outside. In the collective and coaction groups, two participants and the researcher were in a room together. In the collective group, the two participants were told their scores would be combined, while participants in the coaction group were informed that their performances would be marked individually. The result reveals that when participants received positive feedback, participants in the coaction group performed better than the other two conditions. But unsuccessful participants in the coaction group showed impairment compared to the alone and collective participants. This implies that when an individual knows about their failure, the presence of an audience may add more pressure that can further impair their performance.

If study participants knew about audience awareness of past performance, this also influenced subsequent tests. Seta and Hassan (1980) used a memory test and found that knowledge of audience awareness induced more correct answers whether the past performance had been successful or not. Interestingly, the highest scores came from those with a previous low score. It is assumed that individuals in this category are striving to overcome social judgment and create a positive outcome in their next performance (Seta & Hassan, 1980). An individual with a previous success had higher scores on a subsequent performance only if they were unaware of an audience’s preknowledge (Seta & Seta, 1995). This is probably because the pressure to again do well would impair the next performance.

Baumister, Hamilton, & Tice (1985) demonstrated that an individual’s expectations for success pushes them to perform better due to improved self-
efficacy, yet it impairs their performance when an audience expects them to succeed. The researchers showed each test subject a false personality inventory score, supposedly compiled by the audience, which also predicted the participant’s future performance. The highest results were seen when the test subjects were confident about their own abilities but believed the audience had low audience expectations. The lowest performance came when the test subjects had low expectations for their own outcomes but believed the audience expected them to succeed (i.e., low self-efficacy). Another factor can be audience encouragement; if someone in an authority position offers encouragement, the study participants are more engaged and improve their skill (Huang, Krasikova & Liu, 2016).

Crisson, Seta, and Seta (1995) found that study subjects performed worse if they had poor results in the practice task and felt the public expectation to be high; participants who felt the audience to have low or moderate expectations had a better performance. When a subject’s expectation is low and the public expectation is high, participants performed better compared to those in the low and moderate value conditions. It has been assumed that the results reflected the participants’ attempts to prove to themselves and to the experimenter that they can succeed in performing the task they have been given. The individuals’ performance seems to depend on the type of audience: in an organization where a supervisor is perceived as having higher authority and is extremely result-oriented, work was perceived to be less meaningful (Lee, Idris, & Delfabbro, 2017). On the other hand, supervisors who empowered their staff and also cared about their well-being gave the work a higher level of meaningfulness, which increased employee engagement.

The studies mentioned above show that an individual with a satisfactory past performance can perform poorly on subsequent tasks if there is the perception of a high audience expectation. Another influential factor is whether individuals believe that the audience can decide their fate.

Based on these premises, this current study sought to discover whether an individual can maintain self-efficacy and see an improvement in a setting where there is low audience expectation. The present study hypothesized that participants would perform a task better in the presence of an audience that has low expectations compared to when they perform the task without an audience. We predicted that performance would be more impaired when performing in front of an audience with high expectations compared to performing a task alone or in front of an audience with low expectations.

In the current study, the audience was replaced by a third-party tool, namely a video camera. Prior studies show that the presence of a video camera can alter individuals’ prosocial behavior if the camera represents the public’s direct judgment of their behavior (van Rompay, Vonk, & Fransen, 2009). No change was found if the behavior was perceived to be carried out in private. Although the 2009 study did not specifically investigate social facilitation, its findings contribute to the current study’s assumption that a camera implies an audience.
2. METHODS

2.1. Participants

Thirty University of Queensland undergraduate students ($M = 20.63$ years old), comprising 24 females and six males from various programs of study, were asked to participate in this research. The participants’ demographic characteristics are listed in Table 1. They were recruited from the researchers’ pool of friends and relatives, and they were contacted through online messenger applications (i.e., Line and Facebook Messenger). Each participant was identified by a number (1–30). The researchers randomly assigned the participants to groups representing one of three conditions by inputting their identity numbers into the online team-maker feature on the Chirag Mehta website. Each group had ten participants.

Table 1. Demographic characteristics of the participants

| Characteristics       | $n$ | %   |
|-----------------------|-----|-----|
| Gender                |     |     |
| Male                  | 6   | 20  |
| Female                | 24  | 80  |
| Age                   |     |     |
| 15–19                 | 17  | 56.67|
| 20–24                 | 10  | 33.33|
| 25–29                 | 2   | 6.67 |
| 30–34                 | 1   | 3.33 |
| Education             |     |     |
| Undergraduate         | 30  | 100  |

2.2. Design

The study used the aforementioned three groups ([1] alone, [2] low audience expectation, and [3] high audience expectation) posttest-only experimental design. All participants worked on an anagram test in two rounds: a practice round and a performance round. Although performances on both rounds of the tests were measured, only the data obtained from the performance round were analyzed to assess differences among groups.

2.3. Measures and Materials

Each set of anagrams had 15 English words, each four to five letters long (e.g., “omits” and “vein”). The live audience was replaced with a camera for the low- and high-expectation groups. Participants received two manipulation checks, one after completing each anagram. The manipulation checks contained three questions that instructed participants to rate the difficulty of the task (i.e., How difficult did you find the task?), their subjective judgment of the task mastery (i.e., How well did you think you do on the task?), and expectations of the researcher’s ratings (i.e., How much did you feel expected to perform well on that task?). An 11-scale measurement ($0 =$ not at all and $10 = $immense) was used.

2.4. Procedures

Upon entering the library in which the experiment was conducted, participants were asked to enter a private study room and to be seated, while the researcher presented the study material. The real
researcher pretended to be a research assistant who was working for a research supervisor, and this false supervisor was intended to function as a reliable source of feedback. The researcher then gave each participant an information sheet containing material that masked the actual aim of the research. After reading the information sheet, the participant was asked to sign an informed consent, and then the researcher handed them a practice sheet face down. For the practice test, the participant was given two and one-half minutes to solve as many anagrams as they could. The researcher set the timer, left the room, and, at the end of the time, returned to collect the completed practice sheet and to give the participant the manipulation check. The researcher once again left the room long enough to pretend to mark the anagram and to call the false supervisor with a report. The researcher returned to the room and gave the participant false-positive feedback. The false-positive feedback included informing the participants that their score surpassed the results of 86% of the participants from the previous studies and that the supervisor was impressed.

Following the delivery of the false feedback, the participant was then given the second round of the anagram task. This second round, however, was designed differently for each of the three experimental conditions. Participants in the alone condition were given a second set of anagrams, described as another practice round, and were given the same instructions and followed the same procedures as they did in the first round. Upon completion of the second anagram, the researcher returned and collected the anagram sheet before handing the participant the same manipulation check sheet as before. Then, the researcher debriefed the participant to explain the real purpose of the experiment.

Participants in the low- and high-expectation conditions were exposed to a similar procedure after they were given the positive feedback, but they were presented with different sets of expectations. For both groups, the researcher returned with a video camera and then handed participants a performance task sheet containing 15 anagrams of a similar word length as before. The researcher gave the same instructions to the participants while setting up the camera to record their performance. The recording had no real purpose other than creating a false belief that their performance would be compared with the performance of other people.

Participants in the low-expectation group were told they would be evaluated using the highest score from either the practice test or the performance. Participants in the high-expectation group were told that both their task performance and the video recording would be marked to evaluate their performance. The researcher then left the room for two and a half minutes, during which the participant was told to solve as many anagrams as possible. After the time was up, the researcher returned to perform a manipulation check and to debrief the participants.

3. RESULTS

3.1. Manipulation Check

Independent t-tests were conducted to compare the manipulation results in the alone and the audience (low-expectation and high-expectation) conditions. The
participants perceived the task to be intermediate in terms of difficulty (M = 6.43, SD = 1.63). The participants had different subjective levels of mastery: alone (M = 4.00, SD = 2.50) and audience (M = 5.80, SD = 1.54) (t[28] = –2.44, p = 0.021). The results suggest that an individual was more confident in their ability to solve the anagram if an audience was present. Finally, there was no significant difference of the supervisor’s perceived expectation in the groups that were either alone (M = 5.70, SD = 2.50) or with an audience (M = 5.80, SD = 1.93) (t[28] = –1.32, p = 0.20). This indicates that audience expectations did not affect individuals in the two groups with a perceived audience.

Table 2. Mean scores of results in each experimental condition

| Anagrams solved | M   | SD  |
|-----------------|-----|-----|
| Alone           | 5.6 | 3.44|
| Low expectation | 9.5 | 3.31|
| High expectation| 7.8 | 2.25|

3.2. Main analysis

A one-way, between-subjects ANOVA was conducted to compare the effects of audience expectation on the participants' performance in the second round of the anagram task. The means and standard deviations are presented in Table 2. The analysis demonstrates a significant difference in the number of anagrams solved among the three groups (F [2,27] = 4.121, p = 0.027). Further posthoc comparisons using a Tukey HSD reveal that the only significant difference in the number of anagrams solved was between the alone condition (M = 5.6, SD = 3.44) and the low-expectation condition (M = 9.5, SD = 3.31). However, the high-expectation condition (M = 7.8, SD = 2.25) did not significantly differ from the alone and the low-expectation conditions. Overall, the results show that expectation from the audience has an effect on an individual’s performance, but only when the said expectation was low rather than high.

4. DISCUSSION

This study sought to discover whether expectations from an aware audience would affect a subject’s future performance. The current research hypothesized that individuals who performed a task without an audience (alone condition) would perform better than those who performed a task in front of an audience holding a high expectation of their performance (high-expectation condition). Those performing a task in front of an audience holding a low expectation (low-expectation condition) were predicted to perform better than participants in the alone condition. Finally, participants in the low-expectation condition were expected to perform better than those in the high-expectation condition.

The findings of the current study support the hypothesis that audience expectation can have a significant effect
on an individual’s performance. However, the data only managed to support one hypothesis while failing to provide evidence for two of the aforementioned hypotheses. Consistent with previous research, participants who completed the task alone performed worse than participants in the low-expectation condition (Baumister, Hamilton, & Tice, 1985; Crisson, Seta, & Seta, 1995). On the contrary, subjects who performed a second task in the presence of an audience holding a high expectation had similar results to those who performed the task in the alone condition. A non-significant difference was found between the low- and high-expectation conditions. In this particular study, social facilitation seems to have occurred only for individuals who performed a task in the presence of an audience who held low expectations.

The results indicate that participants perform better when they are faced with low expectations and allowed to maintain their self-efficacy. The audience lets them perform within their capacity and at their own pace. Based on a previous study, subjects had a higher engagement with work when the audience was perceived to care for their well-being (Lee, Idris, & Delfabbro, 2017). This better work engagement may encourage subjects with a caring audience to perform better in comparison to those who work alone. The tasks in the alone condition may be perceived to have the lowest task values compared to all conditions. A higher task value is derived from public expectations, which strengthens a participant’s will to prove his or her worth (Crisson, Seta, & Seta, 1995). Since the participants in the alone group didn’t have any perception of audience expectations or any goal to achieve, they underperformed compared to the low-expectation condition.

The absence of an authority figure may have caused results that weren’t significant in the high-expectation condition. As mentioned earlier, an audience that imposes a high level of authority shapes an individual’s self-expectation, which pushes the study subjects to attain that expectation (Carmeli & Schaubroeck, 2007). Then, a result-oriented audience tended to generate the perception that the work wasn’t meaningful, which leads to a lower level of engagement (Lee, Idris, & Delfabbro, 2017). Since the false researcher in our study was absent and replaced by a student, the individuals may have perceived that the audience was not as intimidating. The individuals may not have felt that they had anything of value at stake, even when a higher expectation was described. Moreover, the camera may not give the impression of being attended. Along with the weak audience presence, the encouragement from the supervisor was also weak. Past studies featured a long-established engagement that made the impact of feedback and encouragement significant (Huang, Krasikova & Liu, 2016). This lack of perceived pressure may also be attributable to the participants' awareness of their own performances since the manipulation check results indicated that the participants perceived the anagram task as only moderately difficult to solve; the feedback they were given might have been irrelevant if they had a level of awareness of their own performances.

Several limitations of the current study may have accounted for the non-significant results. The manipulation of the IV might not have been strong enough to produce an effect; the participants in both
the low-expectation and high-expectation conditions were not as influenced by audience expectation as the researchers had originally anticipated. In other words, the participants may not have been convinced enough of the audiences’ expectations to feel pressured.

Past research has demonstrated that people are pressured by expectation if the feedback is backed up by statistical evidence rather than merely stated (Baumister, Hamilton, & Tice, 1985). This type of statistical evidence was missing from this project. In their study, Baumister, Hamilton, & Tice (1985) also convinced participants to believe that their performance in the practice task would predict their outcome in the performance task. This false prediction may add more value to the task and either enhance or impair participants’ performance on the next task. If these types of procedures had been used in the current study, the outcome might have supported the hypothesis.

Differences in individual abilities might have influenced the results. It is possible that some participants were familiar with anagrams, and their innate ability to solve the anagram might have played a more significant role than the experimental manipulation. A language barrier may have hindered some participants’ ability to solve the tasks, meaning that some of the English words in the anagrams might not have been familiar. Gender differences may have had some effect on the participants’ performance. Females have been found to perform worse than males in a Color Categorization Task (CCT) if they are observed by an audience (Mosley, 2012). One probable explanation for this phenomenon is that females are more likely to be worried about researchers’ evaluations, while males are not. The researchers of the current study did not make a deliberate attempt to achieve gender parity, and the study group had 24 females and only six males, which may have thwarted the results of the experiment.

Future studies could use a more rigorous sampling method and experimental procedures to ensure that other confounding variables do not affect the study. For example, if a verbal task (e.g., anagrams) is employed to assess performance, future researchers should attempt to recruit participants who are proficient in the language used in the task. Alternatively, a universal performance task, such as a typing or mathematical task, can be used if the sample is taken from a heterogeneous population. To ensure that the performance task appropriately measures the dependent variable (i.e., task performance), repeated pilot studies may be necessary to fix potential errors before the time of the actual study and to improve participants' performance. Future studies can also increase the statistical power of the data analysis by increasing the number of participants. Furthermore, the provision of feedback in future studies should ensure that the positive feedback is convincing enough for participants, and the expectations set for the participants should also be made more explicit.

Finally, future research in this area can also examine the possible role of an individual's familiarity with the audience that is providing feedback and expectations. Expectations from strangers may have a different effect compared to
expectations from close friends or relatives. Prior research has found that the presence of family and friends leads to greater food consumption than the presence of other companions, which could be because the presence of family and friends creates a more relaxed atmosphere and also promotes social facilitation (Castro, 1994). This topic may prove to be an interesting area of research, particularly studying whether social support from an audience can drive individuals to perform better on a given task.

5. CONCLUSION

The real-life implications of this study help to illustrate how individuals can achieve more when they don’t feel high expectations on their performance and when they also maintain their self-efficacy. For instance, while an employee’s work performance is being monitored continuously, the feeling of being watched by a supervisor may, in fact, stress the employee so much that they cannot function well. Rather than pressuring employees with seemingly high expectations, perhaps encouraging them to perform better through workplace discussions and constructive feedback would be a better alternative that can effectively help them grow and better demonstrate their competence. The supervisor can also shift the working paradigm from result-oriented to process-oriented, making employees feel confident about their abilities and more engaged in the process.

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