

Analyzing Emotion in a Fictional Setting

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The purpose of this study was to evaluate the effect of the Spotlight Effect and gauge whether the anxiety associated with situations in which the Spotlight Effect would be highly prevalent was higher in freshman students compared to senior students. The Spotlight Effect is a phenomenon in which “people believe that the social spotlight shines more brightly on them than it really does” (Gilovich et al., 2000, p. 211). This present study provides an extension to prior research as a quantitative intake on predicted anxiety that would be due to the Spotlight Effect supporting research of the prevalence of the phenomenon. In general, it is common to care about appearance and feel embarrassed, but does the level of emotion felt in response match how observers perceived the mishap? When walking into the wrong classroom is everyone going to remember the mistake if they have no idea who someone is to begin with? When getting dressed, is it so important what one wears besides whether dressing for a casual or professional day? And one of the most common fears, a bad hair day, does everyone critique one’s hair as much as the individual does? This study seeks to find if the level of anxiety in each of these fictional settings and compare the predicted anxiety across graduating classes.

Gilovich and colleagues completed multiple studies on the Spotlight Effect along with different teams. In this study we review two studies. The primary study we will analyze, five studies were conducted by the experimenters in total; however, the first study applies more directly to the study we will conduct. In study one, the researchers had the participants wear “embarrassing shirts” and “briefly enter a room in which other participants were assembled” (Gilovich et al., 2000, p. 212). The researchers predicted “predicted that people would be so consumed with their own knowledge of the shirt and the embarrassment it engendered that they would be unable to accurately assess how noticeable it was to others” and “that they would

overestimate the number of people who noticed their shirt” (p. 212). The procedure involved each participant arriving for the experiment and being told that they will be filling out a questionnaire and sitting until the target participant arrived for the study to begin. The experimenter told the target participant they will be wearing a large shirt with the face of an unpopular musician, agreed upon in early interviews, Barry Manilow. Each target participant was then instructed to enter a room with the other participants, while wearing the shirt, and then the experimenter in the room with the others would allow the target participant to enter, pull up a chair to the table facing the others and then say “on second thought the others are farther ahead so maybe it would be better for you to wait outside for a moment,” (p. 212) and then finally the target participant was asked a few questions, told that the study was on incidental memory, provided predictions for how noticeable the shirt was, and then the participant was debriefed. The other participants were also asked if they remembered what was on the target participants shirt and told that the study focused on incidental memory and were debriefed after their responses. The results of the study were aligned with the hypothesis: “The average estimate made by the targets was exactly twice as high as the average accuracy rate of the observers” (p. 213).

In another study by Gilovich and colleagues, an experimenter asked participants to rate themselves and others’ physical appearance for the day of the experiment, not in terms of attractiveness but how their appearance was, and rate how they predicted the group would rate their appearance on that day. They hypothesized that participants would assume that the ratings from other participants pertaining to their appearance for that day would be more “variable” than the ratings from other participants were. The study was replicated three times with separate groups including different variations of ratios of women to men. After a few weeks of the

participants meeting and having time to gauge one another's attractiveness, an experimenter arrived unannounced and introduced the concept of having good appearance days and bad appearance days and instructed the group to rate everyone in the group in terms of what kind of day they think they are having. The group rated everyone on a 7-point scale with one being "much worse than average," four being "perfectly average," and seven being "much better than average". Next, an experimenter asked participants to rate what kind of day they thought they were having appearance-wise as others would rate them on that same scale. The experimenter collected the questionnaires, thanked the group for their participation, and specifically did not mention returning so that the participants could not plan to tamper with how they looked on any given day affecting the study. The researcher returned four more times and repeated the process. Using standard deviation "across the five sessions" and on the individual level, the results and conclusion of the study supports the hypothesis "that people believe that the variability in their appearance is noticed by others more than it actually is" (p. 95). Both of Gilovich and colleagues' studies we examined here are indicative of the generality of the Spotlight Effects prevalence and the severity of overestimating the potential critiques of observers.

Third, we examined a study from Brown and Stopa (2007) in which they "predicted that socially anxious participants would report higher levels of the Spotlight Effect and the illusion of transparency during a memory task that was performed under high compared to under low social-evaluative conditions" and "that participants would underestimate their task performance and evaluate it in a more negative way under high compared to under low social-evaluative conditions" (p. 808). The study was conducted by the experimenters using a between-subjects design and divided subject to high and low social-evaluative conditions. Each participant was videotaped performing a brief memory task and informed that the video would be evaluated by

experts. In the high social-evaluative condition, participants performed a memory task, were videotaped and informed that experts would be reviewing the tape. In the low social-evaluative condition, participants were secretly videotaped and told that the experimenter was only interested in coding the number of events recalled. After, participants completed assessments on “fear of negative evaluation and depression” (p. 808). Furthermore, “an independent assessor, who was blind to the experimental conditions, watched videotapes of participants’ task performances and completed an assessor’s version” (p. 811) of the assessment. Brown and Stopa concluded that the results of the study were consistent with their hypothesis; however, there was no significant difference between the high social-evaluative condition and the low-social evaluative condition in terms of the Spotlight Effect. This study highlights the effect of personal anxiety from the Spotlight Effect overshadowing the effects of manipulating being more intensely or less intensely observed.

In the present study, we will present a questionnaire to participants in which they will rate what they predict their anxiety response to be in each theoretical situation based on a 7-point scale. At the end of the questionnaire there are demographic questions including a question in which each participant will indicate their grade level. Based on previous research, we hypothesize that freshmen college students will experience more Spotlight Effect anxiety than upperclassmen; therefore, an analysis of the data should indicate that as the grade level increases, Spotlight Effect anxiety will decrease.

Method

Participants

Participants were recruited through an online software known as Sona. The research study is posted to the software, and participants may join voluntarily. In this study, 12.1% were men, 87.1% were women, and 0.9% are non-binary/other. Out of these participants, 0.9% are Native American or American Indian, 1.7% are Asian/Pacific Islander, 4.3% are Black or African American/not of Hispanic origin, 48.3% are White or Caucasian/not of Hispanic origin, 37.1% are Hispanic or Latinx, 6.0% are Biracial, 0.9% are other/ not listed, and 0.9% prefer not to answer. Ages in this study range from 18 to 29 ($M = 19.48$, $SD = 1.87$). Furthermore, the student classification consisted of 50.0% being Freshmen, 25.0% being Sophomores, 14.7% being Juniors, and 10.3% being Seniors.

Design

In this study we use a correlational design to analyze whether there is a relationship between anxiety due to the Spotlight Effect and student classification. This study does not predict causation and only looks at the relationship between the two variables.

Stimuli

This study uses written stimuli to elicit an emotional response in the participants in which they predicted their anxiety in these fictional scenarios. Scenarios consisted of situations that college students may have experienced in which the participant would feel that all eyes are on them, or all eyes could be on them, and it is unwanted attention that could elicit some anxiety in the participant. For example, “*While listening to a lecture, you drop your pencil and it rolls five feet away, forcing you to get up to retrieve it. On a scale of 1-7, with 1 being not anxious at all and 7 being extremely anxious, how would you rate your anxiety in this scenario?*”

Measures

The questionnaire was designed to measure the relationship between anxiety due to the Spotlight Effect and student classification. The responses are on a Likert type scale of 1-7 with 1 = not at all anxious and 7 = extremely anxious. Questions were created with the key goal of writing fictional scenarios that could elicit Spotlight Effect anxiety. Here are a few sample questions:

“While listening to a lecture, you drop your pencil and it rolls five feet away, forcing you to get up to retrieve it. On a scale of 1-7, with 1 being not anxious at all and 7 being extremely anxious, how would you rate your anxiety in this scenario” and *“You get to class and sit down in time for the lecture, yet you notice you are wearing two different shoes of the same color. On a scale of 1-7, with 1 being not anxious at all and 7 being extremely anxious, how would you rate your anxiety in this scenario?”*

Procedure

Participants were recruited using Sona, an online recruiting tool used by the psychology department. The data were collected using an online software called Qualtrics, which is a secure platform for collecting online data. First participants were presented with a consent form, and next participants responded to the survey questions. After completing the survey, participants were debriefed on the study and its intent as well as contact information for the faculty in charge if participants had any questions.

Results

Our hypothesis states that freshman college students will experience more Spotlight Effect anxiety than upperclassmen. We hypothesize that, as the grade level increases, Spotlight Effect anxiety will decrease. To evaluate our hypothesis, we used an independent samples t-test to compare the freshman and senior groups. Upon analysis, the results do not reflect the

hypothesis. There are no significant differences between the responses of Seniors ($M = 4.65$, $SD = .84$) and Freshman ($M = 4.31$, $SD = .99$), $t(68) = 1.09$, $p = .28$, $d = .37$.

Although not a part of our hypothesis, there is a significant difference between the Spotlight Effect anxiety of men ($M = 3.71$, $SD = 1.19$) and women ($M = 4.49$, $SD = .88$), $t(113) = 2.98$, $p = .004$, $d = .75$.

Discussion

Our hypothesis states that freshman college students will experience more Spotlight Effect anxiety than upperclassmen. We hypothesize that, as the grade level increases, Spotlight Effect anxiety will decrease. Our hypothesis was not confirmed by the study. We did not find a significant difference in Spotlight Effect anxiety between classes, but we did find a significant difference in Spotlight Effect anxiety between males and females.

I suspect that our hypothesis was unsupported in the study because Spotlight Effect anxiety should be common throughout all classes. According to multiple definitions, it generalizes that people experience anxiety due to thinking there is more attention on them than there actually is. This effect can certainly be heightened by social anxiety, but in general the theory is that everyone is focused on what others are perceiving of them.

This study was also theoretical. Other studies reviewed in preparation for this study included placing subjects in actual situations. It is possible that the participants could have underestimated their real reaction. In order to understand that possibility, I would suggest completing this study again in tandem with asking participants to be a part of being placed in actual situations. This would provide statistics for predicted results and provide statistics for actual Spotlight Effect anxiety results.

Because all of the research we analyzed prior to the study was produced in a lab setting, this study does not quite relate well to the previous studies. This study cannot negate or corroborate the previous findings of Spotlight Effect Anxiety, because it was produced in a hypothetical questionnaire and is correlational.

Our study was rather limited because it was correlational. If I conducted this study again, I would proctor the same questionnaire again, but I would additionally have the experimental element of putting participants and actual situations in the lab setting that they could relate their real response. This would provide better statistics to understand if there was a reason why there where no significant results in a hypothetical situation but there are significant results for other studies in which there are actual experimental events happening.

This research in not contributory to the study of the Spotlight Effect. It is correlational, and correlation does not equal causation. Unfortunately, there is not much value, except maybe suggesting that another study could be conducted to evaluate if there is a significant underestimation anxiety. This study also reinforces that experimental research that provides evidence is important for understanding the most real and accurate effects.

Even though this study's hypothesis was not supported, there was at least a significant difference between the Spotlight Effect reports of males and females. I think that this could be an interesting impetus to study the differences in societal pressures between males and females that influence social anxieties like the Spotlight Effect. Lastly, this study reinforces the importance of experimental evidence to support findings that may be more beneficial to the study of Spotlight Effect anxiety. The better the research, the better psychologists will be able to understand and have evidence to help more vulnerable people such as people with social anxiety.

References

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