

Analyzing Emotion in a Fictional Setting

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The purpose of this study was to see whether there were varying degrees of anxiety due to the Spotlight Effect depending on what situations our research participants would be in. We also investigated whether or not anxiety levels would fluctuate based on the individual's grade level. The goal behind our study was to get a better understanding of what social factors play key roles in causing anxiety, and when pinpointed, could they be adjusted in order to better accommodate those in such situations. We feel that tackling anxiety at the source could be an easier solution than things such as therapy.

Other researchers have looked at the Spotlight Effect as well and have concluded that it does play a significant role in the way people act in social situations. One study conducted by Gilovich, Medvec, and Savitsky (2000) believed that the Spotlight Effect would have an impact on how individuals act in these situations, with their study being structured around inviting participants to do certain things and gauge how they felt after. Participants would wear T shirts with either an embarrassing or flattering design around a group and afterwards would be asked how many people they thought noticed what they were wearing. The data showed that the actual percentage of those who remembered the shirt was 20%, with the predicted amount by the one wearing the shirt being close to 50%. This study also had participants get into groups and would later on rate how much they contributed and how much those in their group contributed. The results showed that participants thought they contributed more than they did and have a bias towards themselves in group settings.

This would lead to the two coming to 5 conclusions regarding their study. The first being that individuals were more self-conscious when wearing something embarrassing, in this specific instance, an embarrassing t-shirt. Embarrassing situations seemed to trigger the Spotlight Effect

to a greater effect especially when individuals were being observed by another. The second conclusion was that even in situations that weren't inherently embarrassing, people would still overestimate how much others would notice about them or what they are doing. Participants throughout the study would for the most part always rate higher for how many were looking at them regardless of the situation. Even when the shirt was something nice, participants would report that more people noticed than not. The third conclusion was that individuals tend to overestimate how much they aided in group projects. This came as a result of the second aspect of their study, and in most cases, participants would say they contributed much, with their group members offering less. The fourth conclusion was that individuals overthink why people notice things about them. Finally, they stated that if an action in response to a situation is delayed, individuals would experience the Spotlight Effect less. In contrast, if one was to approach participants during the study, they reported higher levels of the Spotlight Effect.

Brown and Stopa (2006) came to a similar conclusion as Gilovich and his study did. 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" (p.808). One group was told they were being openly videotaped while doing a memory task, and one group was told that the experimenters were only interested in the number of events they could recall. This group was also videotaped, but in secret. Both groups were then given a scale and asked to rate various feelings regarding anxiety. The results show that "the spotlight effect was only present under high social-evaluative conditions" (p.813).

Gilovich would later return to research the spotlight effect again, backing up his initial studies findings with more results. This one was structurally similar to his original study, but

covered a variety of assessments, from physical appearance, athletic accomplishments, or performance in video games. In every scenario, it was reported that “participants consistently overestimated the extent to which their ups and downs would be noted by observers.” (Gilovich, 2002). He clarifies later that he believes the overestimation to be due to “a failure to appreciate the extent to which observers are preoccupied with managing their own actions.” (Gilovich, 2002)

We predict that results will indicate a positive correlation between the situations we outlined and higher anxiety levels. Along with this, we also expect there to be a negative correlation between grade level and anxiety due to the spotlight effect in that as one moves up through grades, anxiety will go down. We predict these outcomes based on previous research, with a good selection reporting high levels of anxiety due to embarrassment and the avoidance of standing out in public. In regard to grade level, our prediction is based on the idea that as one continues through college, they would become more accustomed to the experience. This would lead to feeling less anxiety for the chance that it or something like it happens again.

## **Method**

### **Participants**

Our survey had 116 total participants take part, with 87.1% women, and 12.1% being men. Regarding what race our participants identified as, we had 48.3% identify as Caucasian, 37.1% Hispanic, 9% Native American, 4.3% African American, 1.7% Asian, 6% biracial, .9% chose the “other/not listed” option, and .9% chose “prefer not to answer”. The ages of our participants ranged from 18 to 29 ( $M = 19.48$ ,  $SD = 1.87$ ). We had 50% identify as Freshman, 25% Sophomore, 14.7% Junior, and 10.3% Senior. Participants were recruited through SONA,

which is a cloud-based software designed to aid researchers in finding participants for studies. This software is operated by Angelo State University.

### **Design**

Our study analyzes the varying degrees of anxiety and the influence it plays on individuals in scenarios, with the hope being to see whether there is a correlation between the Spotlight Effect and heightened anxiety amongst different grade levels. For that reason, our research is correlational by nature.

### **Stimuli**

Our stimuli were in the form of scenarios we created in order to assess anxiety in our participants. These ranged from something small such as dropping a pencil in class, or something most would consider more embarrassing, like tripping in front of a crowd. These scenarios were crafted by our group, and each varied from around 1-3 sentences.

### **Measures**

Our questionnaire included fictional scenarios in which our participants were asked to rate their anxiety had they been put in the situation described the way we measured anxiety was through a scale of 1-7, with 1 being no anxiety whatsoever and 7 being extreme anxiety. A few sample questions are *You believe you are having a bad hair day. Rate your anxiety in this situation.* to *You get to class ten minutes late and have to walk to your seat while the professor lectures. It is week five of classes. How would you rate your anxiety in this scenario?* Our demographic questions analyzed our participants student classification, gender, race, ethnicity, and age. We gathered this demographic information in order to help answer our prediction, that being lower grade levels will experience higher levels of anxiety due to the spotlight effect than higher grade levels.

## Procedure

We collected data from this survey using the online software program Qualtrics, which is a secure platform for collecting data online. Participants were first given a consent form before being offered the survey, and once completed, were given a debriefing form. This form included more information about our study and had references to other articles and studies as well as contact information for our faculty advisor in case they had any questions.

## Results

We predicted that participants would experience higher levels of anxiety due to the Spotlight Effect in more embarrassing situations. Along with this, we also predicted that participants who were in lower grade levels would experience more anxiety in the same situations than those in higher grade levels. To test our hypothesis, we used an independent samples t-test to measure anxiety in the varying situations we crafted. From the lowest grade classification to the highest, there was no significant difference in responses between the Freshman ( $M = 4.31$ ,  $SD = .99$ ) and Senior participants ( $M = 4.65$ ,  $SD = .84$ ),  $t(68) = -1.096$ ,  $p = .277$ . We also conducted an independent samples t-test to measure whether anxiety would vary between genders. Between men and women, there was a significant difference in anxiety between men ( $M = 3.71$ ,  $SD = 1.19$ ) and women ( $M = 4.49$ ,  $SD = .88$ ),  $t(113) = -2.98$ ,  $p = .004$ .

## Discussion

Our hypothesis for this study was that individuals would experience higher degrees of the spotlight effect the more embarrassing of situations they were put in. Along with this, we also hypothesized that those who were in lower grade levels would experience more anxiety due to the spotlight effect in the same situations as one would who was in a higher-grade level. Our

results showed that this was in fact not the case, and we found no evidence to support our hypotheses. Our study I believe faltered in the procedure for this case. Our survey was designed to add a variation of anxiety through the given situations, but based on the results, it seems as though college is just a very high anxiety space to begin with. With even the least embarrassing scenarios proposing a grandiose amount of anxiety for our participants, our survey didn't have a wide enough range for those answering to express enough variation I imagine.

Expanding on the limitations of our survey, with the scale only being from 1-7 to rate your anxiety I feel as though participants would instead of starting off with small amounts of anxiety, be proposing anxiety levels correlating with that of 4-6's. This I believe is where the problem lies, with so many of our instances producing these sorts of responses, it leaves little room for participants to any higher, thus producing the result for this study as it appears. If I were to do this study again, I would propose even lesser anxiety producing situations and a scale better crafted to elicit a more accurate reading on what one's anxiety would truly feel like in these scenarios as a result of the spotlight effect. In doing so, I believe that the result may be quite different, and show that our hypotheses maybe could be proved down the line. In the future, I would like to see other researchers look better into what the root causes for anxiety in college are, because in this day and age, so many individuals are afraid of their peers noticing them for any one small thing. This issue is what leads to the sorts of responses we got in our survey, and I would hope that if more research comes out, we can find better solutions to this ongoing issue.

I think our research while not successful in proving our hypotheses, is an excellent precursor into more studies in this line of research. There isn't much in the way of studies looking at college students and anxiety, so I would hope that our results should if anything, prove

that there is a need for this type of research. Some of the high points of our study were capturing the feeling of the spotlight effect in participants. I think we did strike a chord with those who answered our survey, seeing as the results elicited the responses that they did. Like stated before, one of the things we did best here is show that there is more room for study in this particular area, and I truly do hope that in the future more researchers look into this.

There are of course a large majority of studies that look into college students, but little in the way of looking into what makes college so hard for those attending it. We looked into a few of the ways that one could develop anxiety in a college setting, with a particular focus on the spotlight effect in our case, but there is so much more to be studied in this regard. Being a college student myself, stepping back and analyzing something that is close to home for me is a privilege I am glad to have, and while we may not have found anything this time, that doesn't mean we won't in the future. There is definitely plenty of potential and with our results, I feel it proves that more needs to be done in the ways of helping college students better adjust to the life they will have through their education. Our participants were all college students and can vouch for how tough those years can be, so I hope that our research inspired others to check on their peers because it is stressful.

## References

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