

## **Alexithymia and Emotional Response Intensity Based on the Perceived Reality of Shocking Videos<sup>1</sup>**

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Alexithymia is the inability or diminished ability to understand and express emotions or feelings in the self and/or of others. This paper addressed the relationship between alexithymia and emotional intensity in response to the perceived reality of information (a video) presented. Students were tested for degree of alexithymia and subsequently divided into one of two groups. Students were shown a disturbing but staged (false) video filmed in a documentary style designed to be perceived as depicting a real event. Half were told it was not real prior to viewing, while the other half were told it was not real immediately after viewing. All groups then responded to a brief survey. Correlations between emotional intensity and levels of alexithymia were performed.

### **Introduction**

There has been research done on alexithymia, however, much of it seems to be in relation to the autism spectrum disorders. Emotion has also been studied a fair amount, however it continues to be questioned on several fronts. When it comes to intensity and manipulation of emotion for example, there is still room for a deeper understanding.

According to Svenaeus (1999), the concept of alexithymia originated to describe patients lacking the words for feelings or emotions. For the purposes of this paper, alexithymia will be defined as the inability or diminished ability to understand and express emotions or feelings in the self and/or others. It should be noted that research suggests, as should be guessed, alexithymic people often show a deficiency in empathy and inappropriate affect dependant on the situation, perhaps due to their inability to read emotion in other people or situations (Svenaeus, 1999).

While most studies have focused on autistic populations, one study did test college students for alexithymia, (Lumley, Gustavson, Partridge, & Labouvie-Vief, 2005). However, they mainly used the experiment to correlate emotional ability to alexithymia. Apart from identifying and confirming existing relationships, there was little to expand the literature with regard to relationships between alexithymia and everyday behavior among non-autistic students.

Alexithymia has been further linked to emotional cognition by studies relating it to shortfalls in the cognitive-experiential element of emotional response and interpersonal regulation of emotion (Taylor, 2000). This could lead to the problems that those with alexithymia have in identification of emotion due to inability to share in emotion and an inability to properly categorize emotion. Therefore, one would expect less appropriate affect to be present demonstrated among those with higher alexithymic scores.

Cognitive theories of emotion pose that processing information is the basis of how emotion is presented. That is to say that how a stimulus is understood will determine what emotion is produced (Siemer, Mauss, & Gross, 2007). This could then mean that whether information is processed as real or hypothetical could directly influence emotional display or production. Siemer, et al. corroborated this expectation that people process emotion differently based on how they interpret the situation.

Fataneh, Marof, and Mariani (2010) asserted that emotion results from the combination of physiological stimulation with how people appraise the situation. This also could be reflected by the responses to questions regarding emotion of those who are unable to correctly appraise a situation, as with alexithymia. Understanding emotion on a cognitive level could be determined

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by appraisal, but also through tools learned over time. With age and exposure, people can learn the tools to properly identify and express emotion (Parker, Eastabrook, Keefer, & Wood, 2010). Thus, alexithymia could be more difficult to detect at a college level and in a group setting. However certain aspects, such as the perceived reality of an event could still reflect significant differences.

In regard to emotional response to fictional, or false, stimuli, Palencik (2008) believes that it is possible for emotional response to fiction to be equally strong as to factual stimuli. However, the real issue is in how a person relates the information. This could also be reflected by those who have trouble processing and relating to emotion which would disadvantage their ability to empathize with emotional stimuli.

There is a question over how people respond to stimuli on an emotional level, based on intensity and whether this is variable when other factors such as reality come into play. For example, should an emotional response to fictional stimuli be less impactful than that to true stimuli? For instance, if shown a staged video in which a person gets hurt or killed, if the person believes it is staged, the emotional response may be less than if the person had thought it to be true.

It is my prediction that people will report a stronger emotional response to a disturbing stimulus if it is not revealed to them that the stimulus is fictional than if it is assumed to be real. The reason for this is that if a person knows that a stimulus is not real, they are likely to desensitize to it because of the amount of fiction in our culture (Krahé, et al., 2010). On the other hand, if an emotionally charged stimulus is believed to reflect real events, then emotional responses should be heightened. Of interest is people's reactions to a false stimulus presented either before they know that it is false, or, after they know that it is false.

Another factor to consider is whether participants are already desensitized to emotional reactions based on exposure through media. It has been suggested that this could be the case as our culture has quite a bit of promotion for risk-taking behavior in the media (Fischer, Greitemeyer, Kastenmüller, Vogrincic, & Sauer, 2011). This fact could lead people to be less emotionally affected by emotional stimuli; however responses should

still be stronger to the extent that observers believe the stimulus to be real, as opposed to fictional.

Through measuring emotional intensity among college students based on the perceived reality of stimuli, conclusions could be drawn to show typical response patterns. These results could be impacted based on how individuals process information. One important consequence of emotional processing is whether the presence of alexithymia reveals variations to the above hypotheses. Thus, the present study will examine relationships between responses to emotional stimuli and degree of alexithymia.

## **Method**

### **Participants**

Students from Robert Morris University were used as participants. One hundred and three general psychology students were tested for alexithymia, using the Online Alexithymia Questionnaire – G2 (Thompson, 2007). Twenty-five students were then used for the second part of the experiment. Eleven participants made up the Prior Disclosure Group, and 14 Post Disclosure Group. As a reward for participation, extra credit was offered. Participants were mixed in race and gender, as well as age. The youngest participant was 18, while the oldest was 40. Nine were female, while 16 were male.

### **Quasi-Experimental Design**

The experiment utilized an independent groups design: Degree of alexithymia: High/Low and Disclosure: Before/After. One hundred and three students completed self-report data on the alexithymia survey. The information gathered from this portion was later factored into the data collected for the second portion. Participants were asked to complete the 37 item alexithymia questionnaire G2 (Thompson, 2007), in exchange for extra credit. For an additional opportunity for extra credit, students were asked to sign up to participate in the second portion of the study. Twenty five students made up the second portion of the study. Participants were divided via random assignment into one of the two disclosure conditions.

### **Materials**

# Alexithymia and emotional response intensity

Three surveys were used during this experiment. All participants were given a printed version of the Online Alexithymia Questionnaire (Thompson, 2007), a 37 item survey to test for possible presence of alexithymia. All participants viewed the video (Girl Hit by Car, 2010) consisting of a girl having a prank played on her and then subsequently running into the street and being hit by a car. About half of participants received the prior disclosure survey, consisting of 13 statements to be rated on a 5 point Likert scale, with 1 being strongly agree and 5 being strongly disagree. The other participants were given the post-disclosure survey, also consisting of 13 statements to be rated on a 5 point Likert scale, with 1 being strongly agree and 5 being strongly disagree. The surveys were the same, with certain wording choices altered to reflect the group.

## Procedure

Upon scheduling participants to complete the second part of the survey, about 33 students responded, with 25 making actual appointments. Random assignment was handled by alternating administration in order to keep both groups as even as possible. The study started with the post disclosure group, and group sizes ranged from 1-5 persons per group.

For the **post disclosure group**, participants were asked to watch a short video clip (Girl Hit by Car, 2010). At the end of the clip, the surveys were handed out and participants were informed that the video was a fake. They were asked to complete the survey as honestly as possible. Participants were also asked to refrain from talking about the study with other class members, and then they were thanked and dismissed.

For the **prior disclosure group**, participants were told in advance that they would be watching a staged video of an event which did not actually occur. They were then shown the same video as the post disclosure group. Upon completion, the survey was handed out and participants were asked to complete it as honestly as possible. After asking that participants not talk about the study, they were thanked and released.

Three participants' data were rendered useless due to their having been previously exposed to the video used in the experiment.

## Results

When entering data, results were reverse scored to reflect the correct direction when finding the correlation. The results showed several significant correlations.

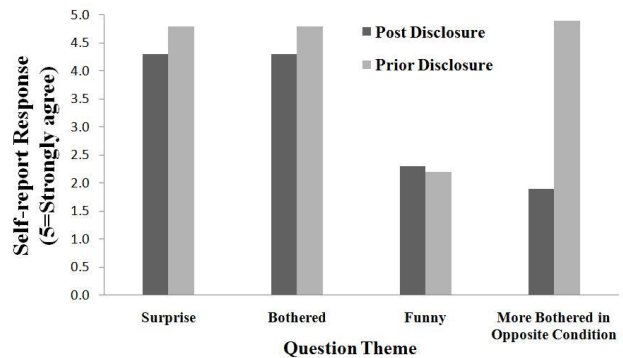
As predicted, there were differences showing a negative correlation between alexithymia and emotions such as surprise,  $r(22) = -0.478$ , and being bothered,  $r(22) = -0.584$ . There was also a significant correlation, where the more alexithymia present, the more participants reported the video to be funny,  $r(22) = 0.507$ .

Also, the more alexithymic, the more people tended to identify with the people pulling the prank in the video,  $r(22) = 0.544$ .

According to prediction, there was a negative correlation among those informed post viewing to report that they would have been more bothered by the opposite condition,  $r(22) = -0.822$ .

These outcomes can be seen in Figure 1, where comparisons are shown in the average responses of each group.

Figure 1. Mean agreement scores for survey items based on alexithymia.



## Discussion

The results confirmed predictions; however there were a few concerns. For one thing, despite all attempts at random distribution, it ended up that all of the higher instances of alexithymia were in the post disclosure group. Despite this, results could still hold validity in that even without the representation of alexithymia present, data still showed a stronger emotional response in those told after that the video was false. Some possible limitations included the video being on the internet

may have led people to suspect its falsehood prematurely. Desensitization based on our culture could have limited negative response to violence. Also, there could have been a social desirability effect, in the answering of certain questions. Another concern is in response to the groups, where people may have produced biased reactions based on those of their peers. Possible future research could include conducting a test with four groups, so that for each condition there is a group representative of alexithymia and of non-alexithymia. Also, for future research, all participants should be shown the video individually.

### References

- Fataneh, N., Marof, R., & Mariani, M. (2010.) The relationship between alexithymia and emotional intelligence, *Asian Social Science*, 6(11), 166-170.
- Fischer, P., Greitemeyer, T., Kastenmüller, A., Vogrincic, C., & Sauer, A. (2011). The effects of risk-glorifying media exposure on risk-positive cognitions, emotions, and behaviors: A meta-analytic review. *Psychological Bulletin*. Advance online publication.
- Girl Hit by Car After Prank. (2010). Retrieved at [ebaumsworld.com/video/watch/81090469](http://ebaumsworld.com/video/watch/81090469)
- Krahé, B., Möller, I., Huesmann, L., Kirwil, L., Felber, J., & Berger, A. (2010). Desensitization to media violence: Links with habitual media violence exposure, aggressive cognitions, and aggressive behavior. *Journal of Personality and Social Psychology*, 100(4), 630-646.
- Lumley, M. A., Gustavson, B. J., Partridge, R., & Labouvie-Vief, G. (2005). Assessing alexithymia and related emotional ability constructs using multiple methods: Interrelationships among measures. *Emotion*, 5(3), 329-342.
- Palencik, J. T. (2008). Emotion and the force of fiction. *Philosophy and Literature*, 32(2), 258-277.
- Parker, J., Eastabrook, J., Keefer, K., & Wood, L. (2010). Can alexithymia be assessed in adolescents? Psychometric properties of the 20-item Toronto Alexithymia Scale in younger, middle, and older adolescents. *Psychological Assessment*, 22(4), 798-808.
- Siemer, M., Mauss, I., & Gross, J. J. (2007). Same situation--different emotions: How appraisals shape our emotions. *Emotion*, 7(3), 592-600.
- Svenaesus, F. (1999). Alexithymia: A phenomenological approach. *Philosophy, Psychiatry, & Psychology*, 6(2), 71-82.
- Taylor, G. (2000). Recent developments in alexithymia theory and research. *Canadian Journal of Psychiatry. Revue Canadienne De Psychiatrie*, 45(2), 134-142.
- Thompson, J. (2007). *Online Alexithymia Questionnaire G2*. Retrieve: [oag.blogspot.com](http://oag.blogspot.com)