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A study in positive psychology: An analysis of pictured victims and empathetic reaction

Alyssa Hanken
University of Northern Iowa

A STUDY IN POSITIVE PSYCHOLOGY: AN ANALYSIS OF PICTURED VICTIMS AND EMPATHETIC REACTION

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Alyssa Marie Hanken

University of Northern Iowa

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Date	Dr. Tammy Gregersen, Honors Thesis Advisor, Department of Languages and Literatures
_____	_____
Date	Dr. Jessica Moon, Director, University Honors Program

Empathy refers to the ability to understand or even share the feelings of others. English language learners are a continually growing group of learners in the public school systems in the United States today. Though classes specifically designed to help these students learn English exist, these are provided for only a few hours a week, so many students still take mainstream content classes through their schools. The students are very diverse in their needs; they may have previous schooling, their native language may differ from English in morphology, phonology, grammar, syntax, and the list goes on. This creates obstacles for mainstream teachers as they struggle to understand the needs of the students without speaking a common tongue and to provide adequate differentiation for those needs. Meeting these needs is a very large task for anyone to undertake. Unfortunately, it is not one that all teachers understand well. Without truly understanding their students' stories and needs, teachers often are not as inclined to dedicate the time and effort needed to assist the students in the best ways possible. Therefore, it is essential for teachers to have empathy for their English language learners. Without empathy from their teachers, the students are less likely to receive the help that they need.

Purpose

Previous research suggests that people are more empathetic when they are introduced to a victim with a face, or an identifiable victim, rather than a victim with no picture associated with him or her. This study will test the validity of these claims through the application of the Toronto Empathy Questionnaire in one control group and one experimental group to determine if putting a face to a name actually does increase empathetic reactions. In the field of English as a Second Language (ESL) teaching, such empathy is extremely important as mainstream teachers are frequently unaware of the plight of immigrants and refugees as a whole, or in the struggles of

their individual students. In order to give ESL students the best education possible, teachers should be unified in the quest for empathy which ultimately results in greater learner success, both academically and emotionally. If the evidence garnered in this project confirms that empathetic reactions increase with identifiable, or pictured, victims, then it is possible that this method can be used to increase the empathy of mainstream teachers toward their students' and their students' families, therefore giving the students a better education and the help that they need and deserve.

Literature Review

Why do people help others? What creates empathy for those in need? Previous research indicates that people may give to those in need or feel more strongly for those in need for a variety of reasons. In this section, I will address the research over factors that affect these behavioral processes.

The Affective System

Emotions are a vital part of our decision-making process. Empathy, sympathy, distress, and many other emotions have the ability to sway or influence decisions. According to Ochsner and Phelps (2007), emotions are capable of directing attention to objects or situations that create or influence emotions. In fact, our emotions may prevent us from making calculated decisions based on importance or highest priority. In a study done in 2001, researchers found that feelings like worry, fear, dread, empathy, and sympathy may actually cause a person to make a decision that is not necessarily what they might deem the best decision in that specific situation (Loewenstein, Weber, Hsee, & Welch, 2001). Therefore, if one were to make a decision with the

affective system engaged, it may make certain objects of more significance seem less important. Epstein (1994) proposed that the affective system has a hold over our decisions. This proposal explains that the affective system is actually faster and more automatic than the deliberative system. The affective system responds quickly, while the deliberative system processes first before responding. Loewenstein et al. (2001), also found that the emotional response, because it is more immediate, may make certain objects of importance seem minor or insignificant.

Impact

Another proposed theory as to why people give to those in need is due to potential impact. Duncan (2004), found that a sense of impact is a central motivator behind giving to charity. In this study, when people believed that their donations would make a real difference, they responded by giving. Cryder, Loewenstein, and Scheines (2013) performed a series of experiments that tested the importance of impact on giving to charitable organizations. Their first study found that impact and vividness best explained donations. The second study revealed that when the influence of sympathy, vividness, and impact was tested simultaneously in a mediation model, impact was the only statistically significant influencer. In their third study, Cryder, et al., found that participants in their detailed and high impact condition were willing to donate substantially more than those in the other conditions (Cryder, Loewenstein, & Scheines, 2013). These studies found that impact was the main driver behind why the participants were moved to contribute to the organizations.

In a study done over sympathy rating changes with and without statistics, researchers Small, Loewenstein, and Slovic suggested one possible explanation for their results might be that people give less when statistics are included with a victim because they do not feel that their

contribution would make an impact on the seemingly large problem (Small, Loewenstein, & Slovic, 2007). Through this research, impact has been demonstrated as being be an important factor in one's decision to give to a charitable organization or to a victim. Impact may also be a factor in increased empathy ratings when a picture is included along with information because doing so increases the participants' knowledge of the victim or refugee, thus increasing their knowledge of the impact that they can have on the individual's situation.

Attention

Attention is another key factor that stimulates emotions and prompts people to give or to respond to those in need. According to Fenske and Raymond (2006), attention can influence emotional reactions in multiple ways. Attention can inhibit, enhance, and produce emotional reactions. Other studies support this proposal. Research done by Holmes, Vuilleumier, and Eimer (2003) found that focal attention can generate more involved emotional processing and can greatly affect the production of emotions. According to this research, attention may be critical to the stimulation of empathetic feelings. This phenomenon can be explained by neural networks between the attentional and emotional neural systems that are able to communicate rapidly (Bush, Luu, & Posner, 2000). Moreover, the rapid communication between these neural systems allows for rapid generation of emotions when there is focused attention.

However, simply drawing attention to a person in any situation will not necessarily generate strong emotions. Distractor stimuli actually decrease emotional reactions to the victims in need. This occurrence is referred to as the attentional inhibition hypothesis (Fenske & Raymond, 2006). Dickert and Slovic (2009), found that participants in their study reported having significantly higher feelings of sympathy when there were no distractors present. The

distractors in these experiments were simply other people or other victims. Therefore, even when told to focus on one specific victim, they did not feel as much sympathy as when the victim was presented alone. This suggests that sympathy is generated to different degrees depending on the amount of focus or attention that a person has on the victim.

In addition, the same study by Dickert and Slovic (2009) also found that sympathy judgements were higher when the image was presented to them online along with the survey, rather than by memory while taking the survey. This indicates that the vividness of the image had an effect on how much sympathy was created in the participant. Another study suggests that perceptions of high vividness regarding the use of the participants' donations positively correlated with higher feelings of sympathy (Cryder et al., 2013). Hence, attention does not necessarily have to be focused on an image for more sympathy to be generated. The very detailed examples used by Cryder et al. (2012) also generated sympathy due to the vividness of the description.

Statistical and Identified Victims

Based on past regularities, single, identified victims seem to receive much more money than statistical or unidentified victims. Small and Loewenstein (2003) confirmed this as a common phenomenon called the *identifiable victim effect*. Schelling (1968) explained that the death of an individual person generates anxiety, guilt, responsibility, religion, and other feelings that are capable of moving people. However, when dealing with a statistical death, most people feel few to none of these emotions (Schelling, 1968).

In Small and Loewenstein's (2003) study, they found that the identifiable victim effect does not come about because of any specific type of information given about the victim. Simply

having an identified, predetermined victim, no matter what information was given, moved the participants to give to the victim more than if they were not identified, or not yet determined (Small & Loewenstein, 2003). In the same study, the "victims" were only missing out on ten dollars yet the results proved that significantly more participants gave the ten dollars to the victim that was already determined than to the victim that had not yet been determined. This was a very small and unimportant situation, yet the results still showed that the participants responded differently to victims of determined and undetermined statuses (Small & Loewenstein, 2003). Additionally, there was no personalizing information or pictures included with the victims, so the participants only knew that the victims were determined or not yet determined. Even without this information, the identified victims received significantly more support from the participants (Small & Loewenstein, 2003). Furthermore, a study done by Kogut and Ritov (2005) found that the highest rate of emotional arousal occurred in their single identified victim condition.

Overall, many studies have been done that confirm that identified victims create a stronger emotional reaction in the participants. But why do identified victims create such a strong response? Jenni and Loewenstein (1997) suggest that identified victims are more vivid, are certain rather than probabilistic, are already victims, and there is usually a smaller reference group size. Due to all of these contributing factors, identified victims consistently create more empathy in the participants in the studies.

One theory that could be used to disprove the identifiable victim effect, and what Jenni and Loewenstein (1997) noted in their explanation of the identified victim effect, is what is known as the *reference group*. This theory holds that people feel more strongly about proportions than the sheer number of lives (Jenni & Loewenstein, 1997). For example, people

would feel much more strongly for a village that loses ten of its fifty residents than for a city that loses ten of its five million residents. Though this could explain the generation of more feelings for identified victims, and though it may be a contributing factor to the reasons behind why people feel sympathy, or empathy, towards specific people rather than statistics, Small and Loewenstein (2003) found that this does not replace or disprove the identifiable victim effect. In their studies, they held the reference group size constant, and the identifiable victim effect still took place. Therefore, though the reference group theory may be valid, it does not fully explain the identifiable victim effect.

In addition, Small, Loewenstein, and Slovic (2007) found an anomaly in the identifiable victim effect. When statistical information is presented with an identified victim, the amount given to the victim is reduced. Moreover, the participants in their study gave the most to identified victims and gave significantly less to identified victims presented with statistics and statistical victims. What is more, there was no substantial difference in the donations made to statistical victims and the identified victims with statistics. One suggestion made in this study was that the statistics concerning a reduction in giving could be partly because the statistics diminish one's reliance on the affective system (Small et al., 2007). Without the quick reaction of the affective system, the participants would have had more time to rely on their deliberative system.

Furthermore, Small, Loewenstein, and Slovic (2007) performed studies aimed at de-biasing the identified victim effect. The bias that they aimed to dismantle is that people care inconsistently. They gave their participants a description of either a statistical or identified victim and half of each group received an overview of the identified victim effect. The group that received the information about the identified victim effect donated less to the identified victim

and donated the same amount to the statistical victim (Small et al., 2007). Moreover, the information only decreased giving to the identifiable victim and had no other significant changes.

Not only that, but Small, Loewenstein, and Slovic (2007) also found this to remain true when additional statistics were given to one group. The victims with additional statistics did not receive as many donations as the identifiable victim without statistics. These results suggest that compelling participants to think deliberately lessens the hold of the affective system over decision-making. Because of this, identifiable victims receive less support, but statistical victims receive consistently low support. In their last experiment on this specific research topic, Small et al. (2007) primed their participants to feel through giving them short questionnaires that forced the participants to feel or at least think about feelings. For example, the feeling-priming condition asked the participants to write what they feel when they hear the word “baby.” After they were primed, the participants received a charity request and five dollars that they could choose to either donate or keep. The identified victims received more help, but the statistical victims did not benefit from the priming (Small et al., 2007). Overall, support for statistical victims remain consistently low no matter what the participants were primed for, and the identifiable victims remained high but received less when the participants were primed to think analytically.

Pictures

Few investigations have been done on the effect of pictures in evoking an emotional response. Peters and Slovic (2000), found that mental images can produce affective tags that may stimulate the selection of certain behaviors. One study conducted by Kogut and Ritov (2005) found that the more vivid a representation of the victim is, the more effective it will be.

Furthermore, this study found that the greatest willingness to give occurred when the victims were identified by name, age, and a picture. The only striking difference between an unidentified and an identified victim arises when a picture is presented (Kogut & Ritov, 2005). The results point to an image being a key distinguishing factor between the willingness to give to an identified victim over an unidentified victim.

Research Question and Hypotheses

There is one primary research question that this project aims to answer: Does the inclusion of a photo or statistics of a refugee English Language Learner influence the empathic response of teachers? A substantial amount of research has been done on the elements that affect a person's empathy levels and the process of doing so. This project specifically focuses on the effects that pictures of a refugee and personal information about a refugee have on two different groups of pre-service teachers.

Based on previous research that finds empathetic reactions increase with more information about the victim, it is hypothesized that members of Group A, who only receive the information, will have no significant difference in their empathy ratings between the first and second questionnaire. In addition, it is hypothesized that members of Group B, who receive a picture with the information, will have a more substantial difference in the results between the first and second data collection.

Methodology

This project is a quantitative survey study of the empathy levels of pre-service teachers in a higher education class at the University of Northern Iowa. This study utilized one control group

and one experimental group. There were 52 participants: 25 in group A (the control group) and 27 in group B (the experimental group). The groupings were determined by the preexisting classes. All participants were enrolled in education classes that are early in the professional sequence of the College of Education at the University of Northern Iowa. The two classes that participated in the study were the same class and taught by the same instructor.

The first step in this research project was to get the study approved by the Institutional Review Board (IRB) because the study involves human subjects. After the IRB approved the project, two professors that taught more than one section of a "Dynamics of Human Development" class were contacted, and one professor responded and agreed to allow the research to take place in her two classes.

Next, each class was surveyed twice. The first time, the consent forms were explained to the class. See Appendix A for the consent forms. These forms outlined the nature of the study, the procedures that would take place, the potential risks and benefits of participating, the right to refuse to participate, and the confidentiality of the study. Once the participants agreed to participate, they each received a copy of the Toronto Empathy Questionnaire (Appendix B), placed the last four digits of their UNI student ID at the top of the form, and listened to the directions that were read aloud with them. Once this was finished, the students filled out the questionnaire. After this, the questionnaires were collected and scored. Both classes followed this procedure.

The second data collection occurred for each class 1.5 weeks later. The second data collection was comprised of different procedures for the two different classes.

The procedures for Group A transpired as follows: the participants were told that they would receive information about a refugee and that they would fill out the Toronto Empathy

Questionnaire again. The participants were asked to read a paper given to them that contains information about a refugee and their past plights (Appendix C). After reading through this information, they completed the Toronto Empathy Questionnaire.

The procedures for Group B occurred as follows: the participants were told that they would receive information about a refugee and a picture of a refugee and that they would fill out the Toronto Empathy Questionnaire again. The information was the same information that Group A received. The participants were asked to read a paper given to them that contains information about a refugee and their past plights and a picture of that refugee (Appendix C). After reading the information and looking at the photo, the participants completed the Toronto Empathy Questionnaire.

After the surveys were complete, the questionnaires were scored again and were matched by student ID numbers to their previous rendition. Next, the point difference between the first and second responses of the surveys was calculated. The results were sorted and analyzed to determine if the type of information the groups received made an impact on the amount of empathy that the students felt during the pre-test.

Results

After the final session of data collection was completed, there were a total of 52 students that participated in this project. There were 25 students in Group A and 27 students in Group B that participated both times, completed the entire questionnaire, and correctly identified themselves with their student ID number. The results of the questionnaire can be seen in the following figures.

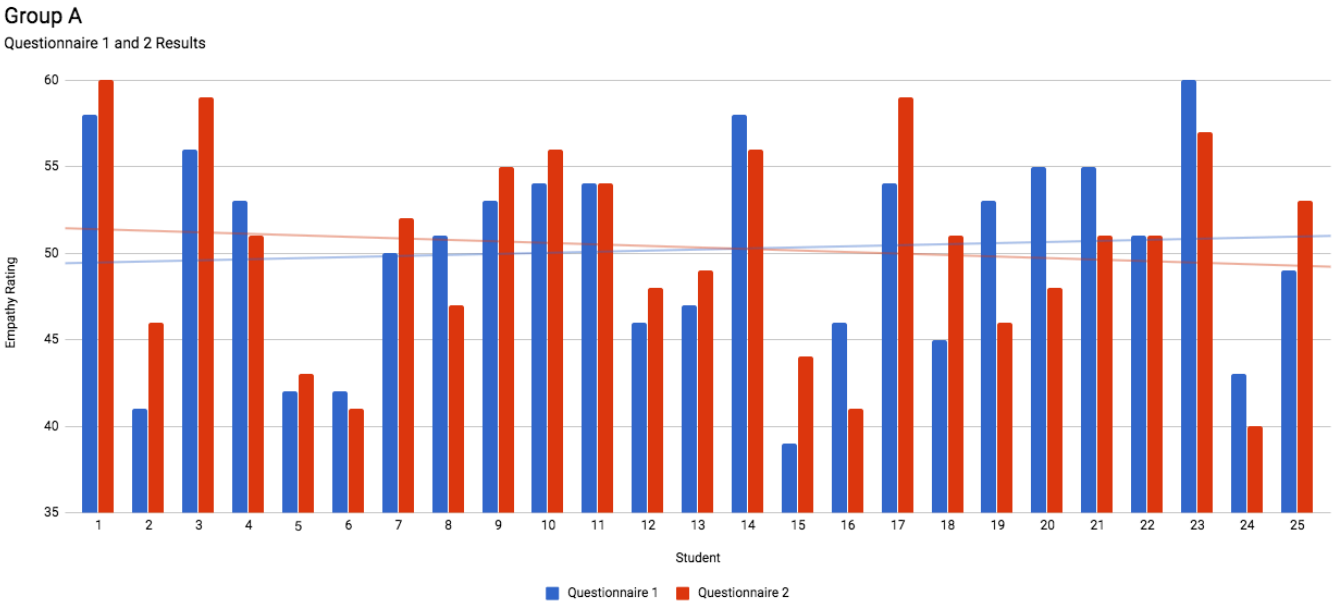


Figure 1. Results for Group A. This figure illustrates the results of the participants in Group A. It indicates their empathy ratings for the first and the second questionnaire.

In Group A, there was no significant difference between the scores of the data collected during the first and second data collection procedures. Figure 1 reveals that the participants varied greatly in the difference of their answers between the first and second questionnaire. No conclusive evidence can be drawn that indicates that giving a participant information about a refugee will increase their empathy rating. The average difference between the two surveys is 0.2. The standard deviation of the first questionnaire is 5.782732918, and the standard deviation of the second questionnaire is 5.780795793. There is no significant difference between the standard deviations either.

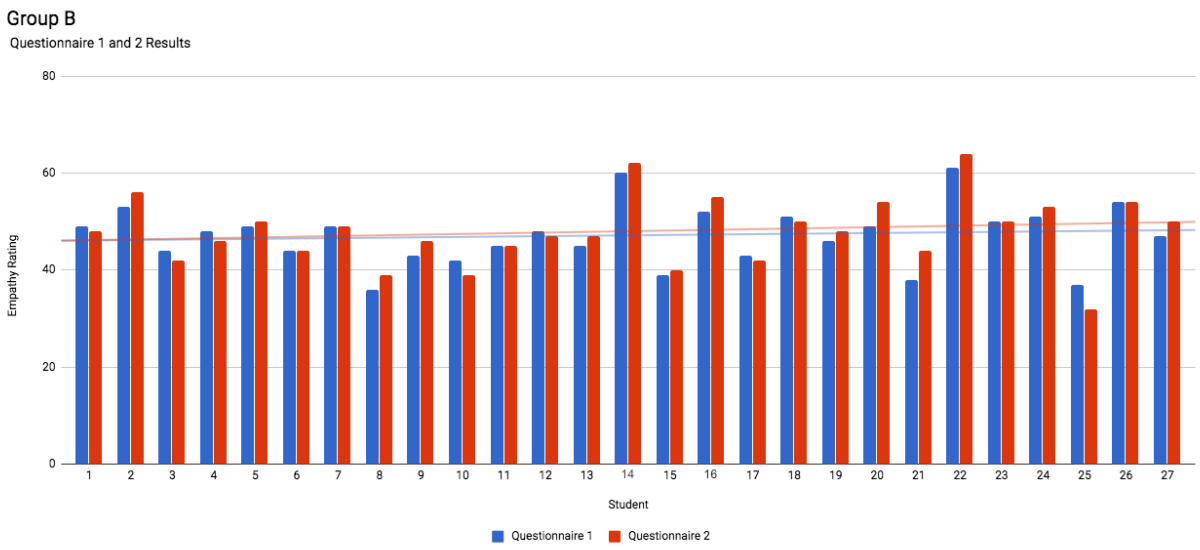


Figure 2. Results for Group B. This figure illustrates the results of the participants in Group B. It indicates their empathy ratings for the first and the second questionnaire.

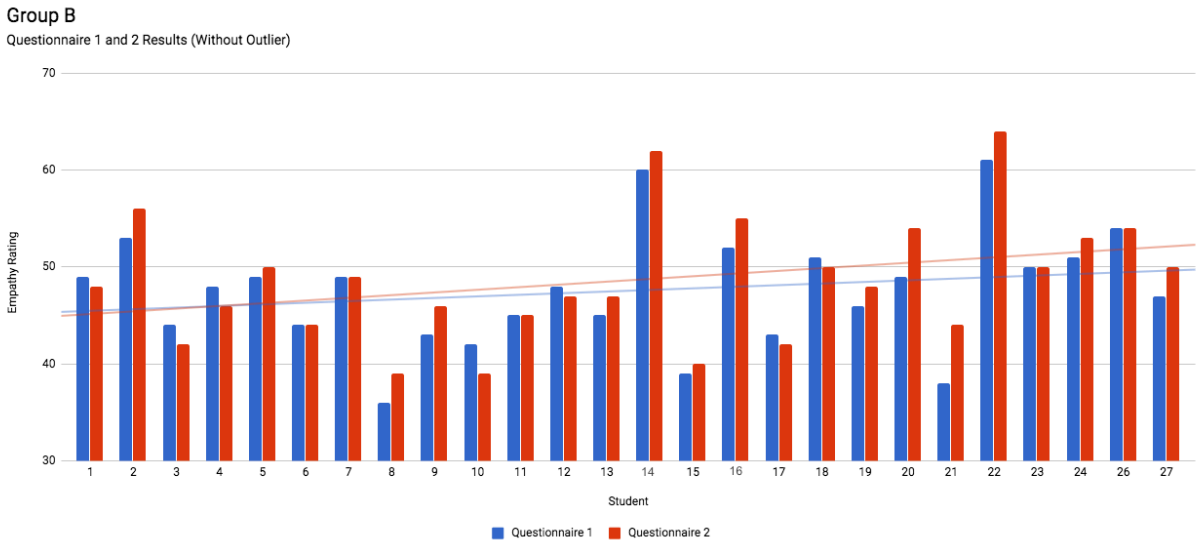


Figure 3. Results for Group B without the outlier. This figure illustrates the results of all participants in Group B, with the exception of the outlier (student number 25). This chart indicates their empathy ratings for the first and the second questionnaire.

The results in Group B show us that presenting a picture along with the information creates a certain amount of discord among the participants' responses. Figures 2 and 3 depict the results of the two questionnaires, Figure 2 with the outlier and Figure 3 without the outlier. This outlier had significantly different results than the rest of the participants in Group B. With the outlier, there is an average 0.85 difference in the empathy ratings of the first questionnaire as compared to the second questionnaire. The standard deviation of the first questionnaire is 6.035105349. The standard deviation of the second questionnaire is 6.896053622. Though there is a small difference between the first and second questionnaires, it is not great enough to be significant.

However, without the outlier there is a 1.04 difference in the empathy ratings. The standard deviation of the first questionnaire without the outlier is 5.806036442, while the standard deviation of the second questionnaire is 6.257776228. This is a significant difference in the responses of the participants between the first and second questionnaire, indicating that including a picture along with information generates a higher empathy rating for the participants.

Limitations and Further Research

The participants chosen for this study were randomly selected through pre-existing class groupings. The class was chosen for its placement as a beginning level course in the education program at the University Northern Iowa. The environment was kept as uniform as possible in that the students were in the same class with the same professor. However, this only allowed for 52 participants in this study. In the future, the research could be done in the same manner as what was done here, with a control group and an experimental group that are in the same class with the same professor. However, the study could include more classes that are early in the

professional sequence that also have multiple sections taught by the same professor. Another option would be to conduct the research online and participants could be selected based on their declared major at the university and their position in the program. This would allow for a larger sum of participants, though the environment could not be as easily managed.

In addition, demographic information about each participant was not collected, and the empathy ratings were analyzed at a group level, and not at an individual level. This does not account for possible changes on the individual level over time. Woodsworth, O'Brien-Malone, Diamond & Schuz (2016) found that many research studies done on positive psychology interventions do not consider the individual and the individual's role in the study, but solely focus on between-group comparisons. Furthermore, Molenaar & Campbell (2009) argue that it is important to study individual changes in order to determine if positive psychology interventions are actually beneficial. Because this study aims to determine if a picture would increase the empathetic reaction of an individual, it would be beneficial to examine the responses of individual participants as well.

As demonstrated in Group B, the one outlier caused a significant difference in the data retrieved from the studies. If the research had focused on the individual, we may have been able to determine the factors that contributed to the difference in the results of the outlier versus the other individuals in the study. Therefore, in future studies aimed at determining the effectiveness of including a picture to increase empathetic responses, studies using individual analysis should be considered. In this way, researchers would focus on the variables that each individual participant has and on the changes in his or her empathy ratings, rather than the changes of the ratings of each group.

Conclusion

This idea was born from a positive psychology activity that suggests that "putting a face" on human suffering increases viewers' empathetic response. This article supported the efficacy of the activity based on the premise that people often feel happier when they do something kind for another person. Two articles investigating this, Small et al. (2007) and Kogut and Ritov (2005), explain that previous studies confirm that empathy increases when a victim is identified rather than remains unidentified. These studies used details, pictures, and the singularity of the victim to test the hypothesis. In the present study, something similar was carried out, with emphasis on an actual picture rather than information identifying the victim. In Group A, the results concurred with previous investigations; but the same did not result for Group B. The results from the first group did not have a significantly different rating in the second data collection as compared to the first. This confirms the idea that information alone does not increase empathic responses.

Similarly, the results from Group B were also not critically different. Figure 2, the average, and the standard deviations demonstrated a slight difference between the first and second rounds of data collection. However, the results from Group B (without the outlier) showed an important change. The slight difference became a stark difference when the outlier was not included in the results. An indefinite conclusion then, can be drawn in which including a picture does generate more empathy. However, this is where further research needs to be done in order to confirm this theory. Including a larger sample population or focusing on individual participants is necessary in order to generalize further.

If, in future research, this argument can be shown to be true, teachers will want to consider it as a way to increase the empathy shown to English language learners by mainstream

teachers. English language learners are in need, and often do not receive the correct type of help simply because they are misunderstood. If educators are able to acquire or gain empathy through a method such as “putting a face” on a student or a student’s family, they may be further inclined to learn more about what each specific student needs and how to meet those needs. Consequently, educators that advocate for these students can use this positive psychology intervention of putting a face to a name or to information in order to better the education and the help that these students receive.

Appendix A

Participant Consent Forms

UNIVERSITY OF NORTHERN IOWA
HUMAN PARTICIPANTS REVIEW
INFORMED CONSENT

Project Title: A Study in Positive Psychology: An Analysis of Pictured Victims and Empathetic Reactions

Name of Investigator(s): Alyssa Hanken

Invitation to Participate: You are invited to participate in a research project conducted through the University of Northern Iowa. The University requires that you give your signed agreement to participate in this project. The following information is provided to help you make an informed decision about whether or not to participate.

Nature and Purpose: This study is designed to discover if including different types of information about refugees can increase empathy in others.

Explanation of Procedures: Today, you will be asked to fill out an empathy questionnaire, which assesses your empathy levels in certain situations. This questionnaire will take around 10 minutes to complete. You will not use your name, but the last four digits of your student ID number in order to remain anonymous.

I will return to your class on a different date, and you will be given information about a specific refugee. After looking over the information, you will again fill out the same empathy questionnaire. This will take you around 15 minutes. You will again use your student ID number so that your answers will remain anonymous.

I will collect the data and compare the results of your questionnaires. I will use this data to present an Honors Thesis at the end of the semester.

Discomfort and Risks: Risks to participation are minimal. It will take time out of your day to participate, and you may experience mild emotional discomfort due to the information you receive about the refugee.

Benefits and Compensation: You will receive no direct benefit from participating in this study.

Confidentiality: Information obtained during this study which could identify you will be kept confidential. The summarized findings with no identifying information will be presented to the open public at the end of this semester. The summarized findings may also be published in an academic journal or presented at a scholarly conference.

Right to Refuse or Withdraw: Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized or lose benefits to which you are otherwise entitled.

Questions: If you have questions about the study or desire information in the future regarding your participation in the study, you can contact Alyssa Hanken at (email has been removed for privacy reasons). You can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

Agreement:

> **I am fully aware of the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement. I am 18 years of age or older.**

_____ _____
(Signature of participant) (Date)

_____
(Printed name of participant)

_____ _____
(Signature of investigator) (Date)

_____ _____
(Signature of instructor/advisor) (Date)

Appendix B

Toronto Empathy Questionnaire

Subject ID:_____
Date:_____

Below is a list of statements. Please read each statement carefully and rate how frequently you feel or act in the manner described. Circle your answer on the response form. There are no right or wrong answers or trick questions. Please answer each question as honestly as you can.

		Never	Rarely	Sometimes	Often	Always
1.	When someone else is feeling excited, I tend to get excited too	0	1	2	3	4
2.	Other people's misfortunes do not disturb me a great deal	0	1	2	3	4
3.	It upsets me to see someone being treated disrespectfully	0	1	2	3	4
4.	I remain unaffected when someone close to me is happy	0	1	2	3	4
5.	I enjoy making other people feel better	0	1	2	3	4
6.	I have tender, concerned feelings for people less fortunate than me	0	1	2	3	4
7.	When a friend starts to talk about his\her problems, I try to steer the conversation towards something else	0	1	2	3	4
8.	I can tell when others are sad even when they do not say anything	0	1	2	3	4
9.	I find that I am "in tune" with other people's moods	0	1	2	3	4
10.	I do not feel sympathy for people who cause their own serious illnesses	0	1	2	3	4
11.	I become irritated when someone cries	0	1	2	3	4
12.	I am not really interested in how other people feel	0	1	2	3	4
13.	I get a strong urge to help when I see someone who is upset	0	1	2	3	4
14.	When I see someone being treated unfairly, I do not feel very much pity for them	0	1	2	3	4
15.	I find it silly for people to cry out of happiness	0	1	2	3	4
16.	When I see someone being taken advantage of, I feel kind of protective towards him\her	0	1	2	3	4

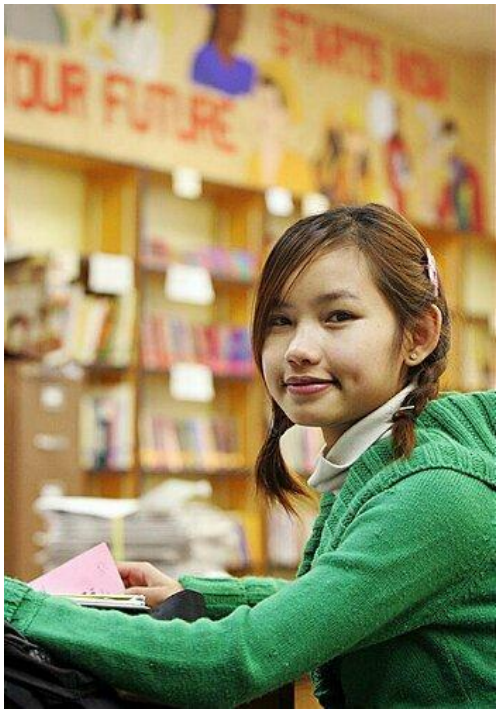
Appendix C

Group A Information

Meet Jeannie. After fleeing from Burma due to persecution, she and her family lived in a refugee camp in Thailand for five years with limited opportunities to attend school. After this, Jeannie and her family received refugee status in the United States and subsequently moved to Waterloo, Iowa. Her native language is Karenni, and she has no background in English. Now, Jeannie attends Kittrell Elementary School in Waterloo and learns English as well as other mandatory curriculum, which is taught in English.

Group B Information and Picture

Meet Jeannie. After fleeing from Burma due to persecution, she and her family lived in a refugee camp in Thailand for five years with limited opportunities to attend school. After this, Jeannie and her family received refugee status in the United States and subsequently moved to Waterloo, Iowa. Her native language is Karenni, and she has no background in English. Now, Jeannie attends Kittrell Elementary School in Waterloo and learns English as well as other mandatory curriculum, which is taught in English.



References

Bush, G., Luu, P. & Posner, M. I. (2000). Cognitive and emotional influences in the anterior cingulate cortex. *Trends in Cognitive Science, 4,* 215-222. doi: 10.1016/S1364-6613(00)01483-2

Cryder, C. E., Loewenstein, G., & Scheines, R. (2013). The donor is in the details. *Organizational Behavior and Human Decision Processes, 120*(1), 15-23. doi:10.1016/j.obhdp.2012.08.002

Dickert, S., & Slovic, P. (2009). Attentional mechanisms in the generation of sympathy. *Judgment and Decision Making, 4*(4), 297-306. Retrieved from: https://doaj.org/article/d71bf67580c24689ac3176bf62236cda

Duncan, B. (2004). A theory of impact philanthropy. *Journal of Public Economics, 88,* 2159-2180. doi:10.1016/S0047-2727(03)00037-9

Epstein, S. (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist, 49,* 709-724. doi:10.1037/0003-066X.49.8.709

Fenske, M. J., Raymond & Raymond, J. E. (2006). Affective influences of selective attention. *Current Directions in Psychological Science, 15,* 312-316. doi:0.1111/j.1467-8721.2006.00459.x

Holmes, A., Vuilleumier, P., & Eimer, M. (2003). The processing of emotional facial expression is gated by spatial attention: Evidence from event related brain potentials. *Cognitive Brain Research, 16,* 174-184. doi:10.1016/S0926-6410(02)00268-9

Jenni, K. E., & Loewenstein, G. F. (1997). Explaining the "Identifiable Victim Effect. *Journal of Risk and Uncertainty, 14,* 235-257. doi:10.1016/S0167-6687(97)89155-X

Kogut, T., & Ritov, I. (2005). The "identified victim" effect: an identified group, or just a single individual? *Journal of Behavioral Decision Making,18*(3), 157-167. doi:10.1002/bdm.492

Loewenstein, G. F., Weber, E. U., Hsee, C. H., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin, 127*, 267-268. doi:10.1037/0033-2909.127.2.267

Molenaar, P., & Campbell, C. (2009). The New Person-Specific Paradigm in Psychology. Current Directions in Psychological Science, 18(2), 112-117.

Ochsner, K. & Phelps, E. (2007). Emerging perspectives on emotion-cognition interactions. *Trends in Cognitive Sciences, 11,* 317-318. doi:10.1016/j.tics.2007.06.008

Peters, E., & Slovic, P. (2000). The Springs of Action: Affective and Analytical Information Processing in Choice. *Personality and Social Psychology Bulletin, 26*(12), 1465-1475. doi:10.1177/01461672002612002

Schelling, T. C. (1968). "The Life you save may be your own." In Samuel B. Chase (ed.), *Problems in Public Expenditure Analysis.* Washington DC: The Brookings Institute.

Small, D., & Loewenstein, G. (2003). Helping a Victim or Helping the Victim: Altruism and Identifiability. *Journal of Risk and Uncertainty, 26*(1), 5-16. doi:10.1023/A:1022299422219

Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes, 102*(2), 143-153. doi:10.1016/j.obhdp.2006.01.005

Woodworth, R. J., O'Brien-Malone, A., Diamond, M. R., & Schüz, B. (2016). Happy Days: Positive Psychology interventions effects on affect in an N-of-1 trial. *International Journal of Clinical and Health Psychology,16*(1), 21-29. doi:https://doi.org/10.1016/j.ijchp.2015.07.006