

The Role of Self-Esteem in College Students Volunteering to Mentor a Presumed Physically Disabled Student

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Received December 23, 2012; Revised April 23, 2013; Accepted April 25, 2013

Abstract The following study was done to test the effect of low and high self-esteem on a person's willingness to mentor a student presumed to be physically disabled. Those with high self-esteem were predicted to feel more comfortable and volunteer more hours mentoring a presumed physically disabled student than those with low self-esteem. Participants (N = 89) viewed a photo of either a female student in a wheelchair or the same female student standing, then reported the level of comfort helping her, how much time they would volunteer to help, and a self-esteem scale. Participants who viewed the wheelchair photo reported feeling more comfortable than those who viewed the standing photo, and those with high self-esteem were willing to give more time a week than those with low self-esteem. Academic major and previous relationships did not have an effect on helping. A ceiling effect for comfort ratings and social desirability may help explain these mixed results.

Keywords: *persons with disability, self-esteem, mentoring, social desirability*

1. Introduction

People tend to have difficulty reacting positively towards persons with disabilities [1]. Having a disability does not mean that the person is unable to do things that 'normal' people do, and most of what people think about persons with disabilities comes from stereotypes. The hardest part about having a disability is not the disability itself; it is the hardship that a person with a disability faces due to stereotypes [2]. Researchers have tried to figure out why there is angst between non-disabled and disabled persons. For decades these two communities have been entwined with the hopes to create "normalization" [3]. To create normalization there must be intermingling of the two communities. With more social interactions, the two groups will understand the other better. How can society increase volunteering to aid those with disabilities? Does having high self-esteem influence whether people help others with physical disabilities?

The attitudes that people bring with them to a social situation can influence the way they perceive the interaction to be, either good or bad. Most research done on this topic has been done to pinpoint reasons that persons without disabilities feel uncomfortable around those persons with disabilities. There is an additive model that applies to interactions with persons with disabilities [3]. These additions to the interaction can be anxiety, self-esteem, personal background, and previous interactions [1,4,5]. Previous studies have shown that anxiety levels of persons anticipating interactions with persons with disabilities can decrease if the person with the disability acknowledges their disability [4].

Research on the effect of a disability awareness program has shown that persons with higher self-esteem are more likely to have positive social interactions with those who have a disability because they tend to experience benefits with any kind of social interaction [1]. Being able to pinpoint what characteristics are ideal for persons working with disabled persons is very important and other researchers have investigated these characteristics [1,4,5].

Research on professions which have more contact with persons with disabilities has pointed out that people's backgrounds can have a lot to do with how they react to persons with disabilities. Persons who are trained as rehabilitation/special education providers were more comfortable working with individuals with both mental and physical disabilities [5]. People in professions that involve encounters with persons with disabilities are much more likely to be comfortable in situations outside of their profession. Thomas et al. also found that persons who are trained in counseling services are comfortable with mental disabilities, but not with physical disabilities, and those who are trained in general education are more comfortable with physical disabilities, but not mental disabilities [5].

The previous encounters that people have had with persons with disabilities can also shape the way they react towards potential interactions with persons with disabilities. People who have been exposed to persons with disabilities, as in a "Buddy Program," are more likely to engage in activities with persons with disabilities than persons who have not had previous social interactions with persons with disabilities [4]. Being exposed to these kinds of situations make the person more knowledgeable and more accepting of the persons that they were not

familiar with before. However, younger students are not familiar with the different categories of disabilities and often blend different disabilities together [6]. Students reported mental retardation to be the same as special needs [6]. Some researchers have proposed that introducing programs such as the “Buddy Program” and a program called “Just Like You” can be helpful. When young students were introduced to a program (Just Like You) in which they were educated on different disabilities and exposed to someone with a physical disability, were more accepting of persons with disabilities and were more knowledgeable on disabilities and how to act in situations with persons with disabilities [7]. Researchers held different sessions to improve student and adult perceptions of persons with disabilities [8]. These sessions and programs can be very helpful in improving perceptions of persons with disabilities, and can be especially helpful in training persons to have positive interactions with persons with disabilities.

The purpose of the current study was to examine attitudes people have towards persons with disabilities, their self-esteem level, and their willingness to mentor a student with a presumed physical disability. This study hypothesized that people who report higher self-esteem, have academic majors that correspond with helping those with disabilities, and those individuals who have had previous encounters with persons with disabilities, will be more comfortable with the idea of mentoring a student with a disability and be more willing to give time to mentor this student. The purpose of this experiment was to investigate how self-esteem and past experiences influence mentoring intentions in college students.

2. Method

2.1. Participants

For the experiment there were 89 participants; 21 men and 68 women. Participants were undergraduate students from a mid-sized public university in the southeastern United States. Participant ages ranged from 18-39, with the average age of 20; $SD = 3.03$. The participants were 73% White/Caucasian, 15.7% Black/African-American, 2.2% Hispanic/Latino, 4.5% Asian, 0% Native American, and 1.1% reported their race as “Other.” The participants were mainly from Introductory Psychology classes or upper-level Psychology classes and were given research credit for participating in the study or extra credit. Participants were treated according to the ethical guidelines and principles of the American Psychological Association [9].

2.2. Materials

The Rosenberg self-esteem scale (SES) was used to measure participants’ overall feeling of general self-worth [10]. The SES has 10 statements in regards to people’s perceptions of themselves. Participants were asked to respond to each question on a Likert scale; 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*. Statements on the survey were personal reflections such as, “I feel that I am a person of worth, at least on an equal plane with others,” which is a positive statement about oneself. There were also statements such as, “All in all, I

am inclined to feel that I am a failure,” which is a negative statement about oneself.

The Attitudes Towards Disabled Persons (ATDP-A) scale is a 30 question survey that provides negative and positive statements in regards to the way people perceive individuals with disabilities [11]. Responses on the ATDP-A were recorded on a 6-point Likert scale: +3 = I agree very much; +2 = I agree pretty much; +1 = I agree a little; -1 = I disagree a little; -2 = I disagree pretty much; and -3 = I disagree very much. Examples of positive statements are: “We should expect just as much from disabled as from non-disabled persons” and “Disabled people are usually sociable.” Examples of negative statements on the ATDP-A are: “Disabled people are more emotional than other people” and “Most disabled persons are different from non-disabled people” [11].

The demographic survey included questions about general background information such as age, sex, academic major, marital status, and race of participants.

Two photographs were used to manipulate the presumption that the student to be mentored had a physical disability or not. The photos were approximately 5in x 7in. The wheelchair group received the photograph of a high school student in a wheelchair. The photograph was of a 15-year old blonde, Caucasian female sitting down in a wheelchair against a white wall wearing light colored jeans and a navy blue sweatshirt. The standing group received the photograph of the student standing up, with no chair or other items in the picture. Both pictures included the statement, “My name is Christine Herpich. I am in 9th grade and need help with English, Math and Social Studies,” with questions underneath the photograph. The first was, “How comfortable are you with mentoring this student?” with responses being: 1 = not at all; 2 = not really; 3 = a little comfortable; 4 = somewhat comfortable; and 5 = very comfortable. The participants were then asked to explain why or why not and answer the free response question “How many hours a week would you give to mentor this student?” Both the student and her mother gave permission to use the photograph.

As a manipulation check, two additional questions were asked at the end of the surveys: “What was the student in the photo wearing?” and “Did the student in the picture have a disability? If so, what was the disability?”

2.3. Procedure

The participants signed up for a study titled “Perceptions of Mentoring Students.” Upon beginning the experiment, participants completed an informed consent form. Participants were randomly assigned to the wheelchair or standing photo conditions. After viewing the photos, participants were asked the three questions about mentoring that student. Next, participants completed the Rosenberg SES [10], the ATDP-A [11], the demographic survey, and the manipulation check questions. Finally, participants were debriefed on the intentions of the study and asked not to discuss the study details with other students.

3. Results

One participant was removed from the wheelchair photograph condition for failing to answer the

manipulation check question, “Did the student in the picture have a disability? If so, what was the disability?” correctly. With the remaining data, a median split was conducted on the self-esteem scores to create high and low self-esteem categories for analysis. Two 2 (Self-esteem: high or low) x 2 (Photograph condition: wheelchair or standing) factorial analysis of variances (ANOVAs) were used to determine the difference on dependent variables comfort and time given. In order to determine statistical significance, $p < .05$ was used.

The first ANOVA was used to determine how comfortable participants reported to be on a Likert scale to mentoring the student in the picture. The first ANOVA showed a significant main effect for the photograph condition, $F(1,87) = 3.94$, $p = .05$, $\eta_p^2 = .44$. The participants who saw the wheelchair photo ($M = 4.65$, $SD = .75$) reported feeling more comfortable mentoring the student than those who saw the standing photo ($M = 4.33$, $SD = .83$). However, there was no significant main effect for self-esteem, $F(1,87) = .30$, $p = .58$, $\eta_p^2 = .004$. Those participants who were categorized as having low self-esteem ($M = 4.53$, $SD = .79$) reported feeling a little bit more comfortable than those categorized as having high self-esteem ($M = 4.48$, $SD = 8.21$). There was also no significant interaction effect, $F(1,87) = .06$, $p = .81$, $\eta_p^2 = .001$. See Figure 1 for results. Furthermore, there was no correlation between self-esteem and comfort level mentoring, $r(87) = .003$, $p = .98$.

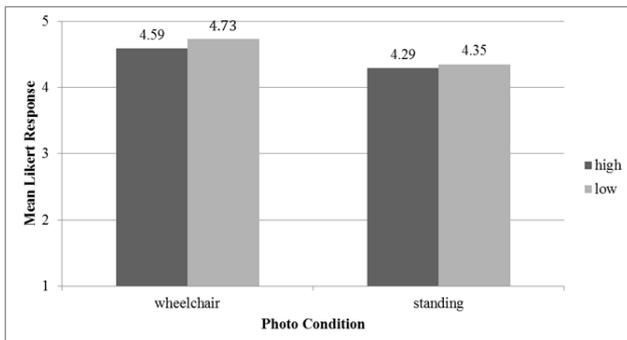


Figure 1. Mean comfort level of mentoring the student in the photograph by photograph condition (wheelchair or standing) and self-esteem category (high or low)

Another 2x2 ANOVA was used to determine the difference between the photograph conditions and self-esteem levels on how much time the participant was willing to give to mentor the student during a week. The second ANOVA showed a significant main effect for self-esteem, $F(1,87) = 4.74$, $p = .033$, $\eta_p^2 = .07$. Those participants who were categorized as having high self-esteem ($M = 7.98$, $SD = 7.07$) reported being willing to give more hours per week to mentoring the student than those participants categorized as having low self-esteem ($M = 4.94$, $SD = 3.56$). However, there was not a significant main effect for photograph condition, $F(1,87) = .001$, $p = .98$, $\eta_p^2 < .01$. Participants who were in the wheelchair photo condition ($M = 6.38$, $SD = 6.65$) reported being willing to give only a little more time to mentoring the child than those in the standing photo condition ($M = 6.27$, $SD = 4.12$). No significant interaction effect was found, $F(1,87) = .15$, $p = .69$, $\eta_p^2 = .002$. See Figure 2 for results. There was also a positive, marginally significant correlation between self-esteem and

time volunteered to mentor, $r(87) = .20$, $p = .10$. Interestingly, ATDP-A was not correlated with self-esteem, comfort with mentoring, or time volunteered, all $r_s < .10$.

A 2-tailed independent t-test was used to compare a person's previous relationships with persons with disabilities and his or her responses on the comfort and time dependent variables. The difference in comfort level for persons who had previous relations with a person with a disability ($M = 4.53$, $SD = .73$) and persons who did not have previous relations with a person with a disability ($M = 4.43$, $SD = .99$) was not statistically significant, $t(87) = -.49$, $p = .62$. The difference in the reported time a person was willing to give to mentor between persons who had previous relations with a person with a disability ($M = 6.01$, $SD = 6.66$) and those persons who did not have previous relations with a person with a disability ($M = 7.31$, $SD = 5.48$) was also not statistically significant, $t(64) = .81$, $p = .42$.

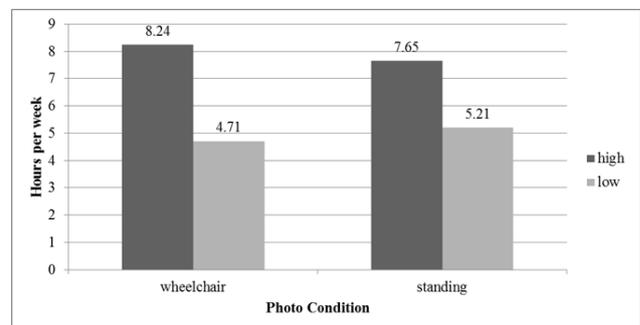


Figure 2. Mean hours per week willing to mentor the student in the photograph by photograph condition (wheelchair or standing) and self-esteem category (high or low)

A 2-tailed independent t-test was also used to compare a person's academic major (helping or non-helping) on the comfort and time dependent variables. Majors were separated into two groups: Helping majors, which included Education and Psychology because persons who go into professions with these majors are more likely to deal with persons with disabilities on a day-to-day basis, and Non-helping majors, which included Business, Communication, Marine Science, and History. There was no statistically significant differences between academic majors on comfort level, $t(53) = 1.07$, $p = .29$. Those categorized as having a Helping major ($M = 4.56$, $SD = .70$) only rated comfort level slightly higher than those categorized as having a Non-Helping major ($M = 4.29$, $SD = 1.12$). The difference in the reported time participants were willing to give between Helping ($M = 7.50$, $SD = 5.28$) and Non-helping ($M = 5.41$, $SD = 4.24$) majors was not statistically significant, $t(39) = 1.41$, $p = .17$, although Helping majors did offer approximately 2 more hours of mentoring than Non-helping majors.

4. Discussion

The purpose of this study was to find out if persons who report having higher self-esteem, persons who had previous relationships with persons with disabilities, or persons who have academic majors dealing with persons with disabilities would be more willing to mentor a student with a presumed physical disability.

The hypothesis that persons categorized as having higher self-esteem would report greater comfort with mentoring a presumed physically disabled student than those with lower self-esteem was not supported. Results showed that self-esteem did not have an effect on how comfortable the participant felt with mentoring a student. In fact, participants reported greater comfort mentoring the student pictured in a wheelchair than the student pictured standing. These results were not expected. A ceiling effect and social desirability may explain this outcome. All of our groups had average scores above 4 on a 5-point scale. Participants were overcompensating for their level of comfort and reporting very high, socially desirable, levels. Furthermore, we looked at correlations between comfort and time volunteered in both conditions to see if there were any patterns. In the wheelchair photo condition there were no correlations, but in the standing photo condition comfort correlated positively with the amount of time participants reported they were willing to give mentoring. Persons who reported feeling a higher level of comfort mentoring the student were also willing to give greater amounts of time to mentoring. The fact that the two photo conditions did not both have positive correlations between comfort and time volunteered suggests social desirability may have influenced the results. Social desirability can be defined as the bias in behaviors that persons report that are unlike their true behaviors in order to appeal to society [12]. Persons in the wheelchair photo condition may have reported high comfort levels because they saw a photo of a student in a wheelchair and thought that they needed to appear that they are comfortable with mentoring this student to society, but when asked how much time a week they would give to mentor the student his or her true feelings came out and they reported to not want to give more time to mentor the student than those in the standing photo condition.

The hypothesis that persons with higher self-esteem would report that they would be willing to give more time during a week to mentor a student was supported. Persons categorized with higher self-esteem did report offering more hours mentoring than those who were categorized as having low self-esteem. In addition, self-esteem scores were positively correlated with time volunteered.

The hypothesis that persons who had previous relationships with a person with a disability would score higher on comfort level and time volunteering than those who did not have previous relationships was not supported. Participants who had previous relationships with a person with a disability did not score significantly higher than those persons who have not had encounters on the comfort level or time mentoring variables. In addition, there was no relationship between ADTP-A and the comfort mentoring and time helping variables.

The fourth and final hypothesis was that persons who had majors that were categorized as Helping majors would score higher than those who were categorized as Non-helping majors on comfort level and time volunteered to mentor. This hypothesis was not supported; having a Helping major instead of a Non-helping major did not have a significant effect on their comfort ratings or volunteer time, although Helping majors did reported a willingness to mentor for more hours than those in Non-helping majors.

A major limitation to this study was the sample. Both the size and the sample itself were not ideal to generalize to a general population. The hypotheses that were not supported could have possibly been supported with enough participants; especially the fourth hypothesis that academic major would have an effect on comfort and volunteer time. If there were enough participants who had specific majors, such as Psychology versus Business, instead of Helping versus Non-helping majors, further differences between majors could be found.

For future research, having a larger sample with more than just undergraduate students from a single university would be an improvement. Investigating different types of disabilities, including mental and various forms of physical disabilities, would be a logical extension of the current research. Another aspect that could be expanded on would be to have participants sign up for a mentoring program and bring an actual person into a room, either disabled or not, such as when researchers [1] brought in a person in an electric wheelchair, and go through an hour long session with the student and have pre- and post-tests for the participants. Investigating anxiety level could also be interesting, as when researchers [4] looked at anxiety levels of participants when placed in a "Buddy Program." Eliminating social desirability bias in future research would be very important. Some researchers [13] believe that social desirability bias can be reduced by assuring that the research is indeed anonymous and confidential in hopes that the participant will respond with their true feelings. They also say that taking an indirect approach to questioning and deception of the real purpose of the study can help eliminate social desirability bias.

This study, while using a restricted sample of college students, did result in the support of one of our hypotheses. More importantly, it represents a successful exercise in applying the scientific method to affirm or challenge the findings of previous studies, thereby advancing our understanding of factors that affect human interaction.

Author Note

This research was completed under the supervision of the second author as faculty advisor.

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