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The Relationships of Sex and Attachment Security with Self-Reported Altruism

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## Abstract

The present study examined the relationships between one's sex, attachment security, and self-reported altruism. Fifty-seven undergraduate psychology students from a private southeastern US university completed a demographics questionnaire and measures of attachment security and self-reported altruism. In contrast to our hypotheses, results indicate that no significant relationships exist between one's sex, nor between one's attachment security, with self-reported altruism. However, in comparing *non-high* vs. *high* attachment security with altruism, a significant relationship was found. A significant interaction between political affiliation and attachment security also exists; specifically Republicans of *high* attachment security reported more altruistic behaviors. Researching altruism and the people who display it may have very positive implications and provide great insights into those who are most likely to volunteer.

### The Relationships of Sex and Attachment Security with Self-Reported Altruism

Rarely does one turn on the news or read the headline on the newspaper cover and learn of people performing great acts of altruism. Rather, we are often besieged by stories of murder, war, and crime that leave us believing that the world in which we live is cynical and disparaging. Altruism, it seems, generally goes unnoticed. Although, it would not seem so astounding to randomly pick a town out of the phone book, go there, and find that a middle school is collecting old cell phones for victims of domestic abuse or that its local church is hosting a canned food drive. These are both wonderfully kind acts, but where can one distinguish between actual altruism and a well-developed sense of social responsibility, or a *moral obligation* to help others? Lee, Kang, Lee, and Park (2005) define *altruism* as the unselfish concern for the welfare of others; in other words, an altruistic person is concerned and helpful when no prospect of reward is present.

Researchers have long searched for a mechanism behind such prosocial behavior, the genuine *motivation* underlying an action that benefits another individual and gives meaning to the term “altruism”, as defined by Bierhoff (as cited in Lee et al., 2005). Particular philanthropists who frequently come to mind include Mother Teresa, Oskar Schindler, and Mahatma Gandhi; these *exemplary altruists* (EA) have repeatedly demonstrated a strong sense of character and personality traits embodying a high sense of integrity and autonomy, strong parental attachment, and well-developed self-control (Lee et al., 2005). Interestingly, many altruists have also experienced psychological or financial difficulties in their early years, a finding which we will further examine in our own study.

In their study, Lee et al. (2005) individually interviewed 60 exemplary altruists (78% males, 22% females) who had been honored in a national television program for their altruistic

behaviors. Participants ranged in age from 25 to 67, with a median age of 47. These EAs had been exhibiting altruistic behaviors for extended periods of time, some for as long as 35 years. Interview questions asked covered specific areas including: *developmental characteristics* (“Could you tell us about your early life experience that you think influenced you?”), *self-concept* (“What kind of person do you think you are?”), *view of humanitarian nature* (“What do you think about human nature?”), and *reinforcement and maintenance of altruistic behavior* (“What leads you to your altruistic behavior?”). As discussed above, EAs show a high sense of integrity and self-esteem. They are consistent, voluntary, and demonstrate internalized social responsibility (Lee et al., 2005). Fascinatingly, their altruistic behaviors have become integrated components of their self-schema.

According to Eisenberg and Mussen (1989), supportive parenting and a cohesive, harmonious family environment in fact enhance altruistic behavior. Regarding such positive modeling, EAs reported strong attachment to parental guardians who moreover, have served as lifelong role models for them. Additionally, many EAs had liberal views on politics and the labor movement, a confound which we will examine in the present study. Due to the nature of one-on-one, in-depth interviews, it is important to note that these results may reflect *social desirability* responses.

According to Rushton, Chrisjohn, and Fekken (1981), altruism is consistent enough across situations to be considered a stable personality trait. Such persona qualities reflecting positive affect directly correlate with altruism (Krueger, Hicks, and McGue, 2001). Secure attachment has also been found to correlate with positive affect and therefore may too, associate with altruistic tendencies (Mikulincer & Shaver, 2005). Theoretically, people who have secure social attachments should have an easier time perceiving and responding to the suffering of

others. In 1969, John Bowlby first proposed that human beings are born with the *attachment behavioral system*, an innate psychobiological system that motivates us to seek attachment figures who will protect us (Mikulincer & Shaver, 2005). This system is especially sensitive in early development and is affected by our social interactions, namely with our earliest caregivers. Optimal functioning (*i.e.*, secure attachment) is greatest when attachment figures are available and responsive in times of need (Mikulincer & Shaver, 2005). It is also noted that only when people feel reasonably secure themselves can they more effectively direct their attention toward the needs of others (*i.e.*, altruism).

In their studies, Mikulincer and Shaver (2005) found that compassionate feelings, values, and altruistic behaviors are reinforced by attachment security. Their first study primed an unknown number of participants with representations of either attachment security (the name of a security-providing attachment figure) or attachment-unrelated representations (the name of a mere acquaintance). Participants then watched a confederate perform increasingly difficult tasks; as the study progressed, she became more visibly distressed. Next, the participants were given the opportunity to take her place, in effect sacrificing themselves for the welfare of another. Results of the study show that momentary and subliminal activation of secure attachment did in fact increase participant willingness to take the distressed confederate's place. In a similar second study, Mikulincer and Shaver (2005) consciously enhanced attachment security by asking participants to remember experiences of being cared for and supported. Both studies yielded similarly positive and significant results.

One might expect that even in altruism, sex differences exist. In 1986, Eagly and Crowley proposed the *social role theory of helping*, a rationale as to why the behavioral motives of men and women might differ. In short, this theory postulates that women have been socialized

from early on into more nurturing roles while men have historically been more “heroic and chivalrous” (Fletcher & Major, 2004). Lead to believe that women might be more involved in sustained long-term helping behaviors, and men in more short-term, directed endeavors, we might hypothesize that women have greater altruistic motives (*i.e.*, values) while men possess more self-interested (*i.e.*, career) intentions. However, in their 1998 study, Penner and Finkelstein found contrasting results in the altruistic motives in a population of AIDS volunteers; men ranked higher (Fletcher & Major, 2004).

In their attempt to understand the sex differences among motivations of medical students to volunteer, researchers Fletcher and Major (2004) surveyed 51 medical students in the mid-Atlantic region of the United States with the Volunteer Functions Inventory (VFI). The VFI is a measure of six motives common to volunteers: *values*, *understanding*, *enhancement*, *career*, *social*, and *protective* functions covering a range from truly altruistic (“humane concern for others”) to career-oriented goals (“volunteering can help me to get my foot in the door”). Higher VFI scores reflect greater levels of altruistic, rather than career, motivation. Results of the study indicate a significant sex relationship does indeed exist; women rated all six motives higher than men, four of which (*values*, *enhancement*, *understanding*, and *protective*) were significant. This may be consistent with the social role theory of helping, proposing that women are more motivated than men are to volunteer, for any reason (Fletcher & Major, 2004).

With similar questions in mind, Kee-Lee Chou (2001) tested the effects of age, sex, and participation in volunteer activities on the altruistic behavior of Chinese adolescents. Chou surveyed 1,105 Chinese students (41.4% boys, 58.6% girls) from 20 high schools in Hong Kong, selected for their range of socioeconomic brackets and family structure variety. A modified version of the Rushton, Chrisjohn, and Fekken Self-Report Altruism scale (C-SRA), which was

validated by Chou (1996), was used to measure altruistic behavior (Chou, 2001). The participants rated their frequency of 19 behaviors on a 7-point scale ranging from 1 (*never*) to 7 (*all of the time*). Multiple regression analysis was used to reduce the problem of outside confounds. Results indicated significant, yet moderate correlations for household income and frequency of volunteer participation (Chou, 2001). There was also a significant effect of age on altruistic behavior such that older adolescents had a higher rating of this prosocial behavior. No significant sex differences were found.

Clearly, our many personality traits and past experiences interact to form our whole complex persona. As such, the present study examines the correlation between two variables with self-reported altruistic behavior, one's sex and level of attachment security. It is hypothesized that there will be a significant relationship between one's level of attachment security and altruistic behaviors. It is also believed that one's sex corresponds with altruism, specifically that females are more altruistic than males. Possibly confounding, yet insightful variables also studied include ethnicity, range of parental income, and political party affiliation.

## Method

### *Participants*

Fifty-seven undergraduate college psychology students (28.1% males, 72.9% females) from the University of Miami, a private southeastern institution, participated in this study as part of an Experimental Psychology course curriculum. The participant's age range varied from 19 to 24 years with a mean age of 20.70 ( $SD = 1.25$ ). Most participants were psychology or neuroscience majors in their third or fourth year of school. Additionally, the majority were Caucasians (43.9%) followed by Hispanics (22.8%), African Americans (10.5%), Asians (10.5%), and Others (12.3%). Because the range of participants' parental annual income may be

of particular interest to our hypothesis, we will note that 49.1% of participants' parents earned over \$100,000 a year, 21.1% earned between \$70,000 and \$100,000 a year, 22.8% earned between \$35,000 and \$70,000 a year, and 7.0% earned less than \$35,000 a year. Interestingly, 64.9% of participants marked themselves as a Democrat, while 26.3% checked Republican. 8.8% gave no response to political party affiliation. The participants did not receive any compensation for their participation and although it was encouraged, partaking was not required.

### *Materials*

Participants completed a demographics survey consisting of items regarding their sex, age, and ethnicity. Questions of political party affiliation and annual parental income were also included to control for any confounding variables. The measures used in the present study consisted of the Lipson-Parra Adult Attachment scale (1990) and the Self-Reported Altruism scale (Ruston et al., 1981).

The Lipson-Parra Adult Attachment scale is a 21 question survey that measures level of participant attachment on a 4 point scale, whereas 1 (*Not at All True*), 2 (*Slightly True*), 3 (*Mostly True*), and 4 (*Completely True*) correspond to the extent to which the participant agrees with a statement regarding a particular person in the participant's life. Items include statements such as "I feel safe when I am with this person" and "I look toward this person for guidance/advice or opinions". A score of 60 and above is indicative of a *strong* level of attachment, 40 – 60 demonstrates a *moderate* level of attachment, and a score below 40 is indicative of a *minimal* level of attachment. The scale's construct validity of .26.0 was determined via factor analysis, accounting for 50 percent of the variance. A high alpha value of .97 provided evidence for the strong internal reliability.

Participants with high scores on the Self-Report Altruism scale (Rushton et al., 1981) report greater levels of altruistic behavior, are more likely to be perceived by their peers as “altruistic”, and are also more likely to have actually performed any said altruistic behavior (Rushton et al., 1981). The 18-item scale consists of statements such as “I have donated blood” and “I have voluntarily looked after another’s plants, pets, house, or children without being paid for it”. Participants rated their frequency of each altruistic behavior on a scale from 1 (*Never*), 2 (*Once*), 3 (*More than Once*), 4 (*Often*), to 5 (*Very Often*). Between the peer-rated Self-Report Altruism scale and a peer-rated global altruism measure there is a significant correlation of  $r = 0.54$  (Rushton et al., 1981). Additionally, Rushton et al. determined the scale to have a reasonably high reliability and internal consistency ( $\alpha = .89$ ); the scale’s validity is unknown.

### *Procedure*

Potential participants were informed of the general purpose of the study. They were then issued an informed consent form and made aware that they were not required to participate. After signing said form, participants had 15 minutes to complete a packet consisting of the demographics questionnaire, the Lipson-Parra Adult Attachment scale (1990), and the Self-Report Altruism scale (Rushton et al., 1981) in any order. Participant confidentiality was maintained by the use of identification numbers on the packets and the anonymity of not writing one’s name. The same procedure was repeated in each of the four different Experimental Psychology laboratory sections, while only the last lab section was told of the hypotheses. All lab sections were thanked for their participation.

### Results

First, the relationship between attachment security and self-reported altruism was examined. Item 6 on the Self-Report Altruism scale (Rushton et al., 1981) was reverse scored.

Accounting for this reverse scored item, the sum total of all the subscale scores was calculated; higher scores indicate greater altruistic tendencies. An alpha level of .05 was used for all analyses conducted. Results of a regression analysis indicate that attachment security and altruism are not significantly correlated,  $F(1,55) = 1.134, p = .292$ . Similarly and by use of a General Linear Model (GLM), sex and altruism were found to be not significantly associated,  $F(1,55) = 0.050, p = .824$ .

Ethnicity and parental income were also examined as confounding variables of altruistic behavior; both were found not to be significantly correlated with altruism,  $F(4,52) = .200, p = .937$  and  $F(3,53) = 1.834, p = .152$ , respectively.

Markedly, political party affiliation was a confound and yet the only variable found to significantly correlate with altruism,  $F(2,54) = 3.246, p = .047$ . Analyses of the means shows that, as compared with Democrats ( $N = 37, M = 44.650, SD = 10.654$ ), Republicans reported more altruistic behavior ( $N = 15, M = 52.870, SD = 8.408$ ). A post hoc analysis of Tukey's Honestly Significant Difference further supported a significance between Republicans ( $N = 15$ ) and non-Republicans ( $N = 42$ ) on self-reported altruism,  $Tukey's\ HSD = 8.218, SE = 3.241, p = .037$ .

Traditionally, the Lipson-Parra Adult Attachment scale (1990) is used by grouping participants into three different continuous levels of attachment – *low*, *medium*, or *high*. Given that our initial results found no significance upon self-reported altruism, we instead partitioned our attachment group into *non-high* ( $N = 38, M = 45.760, SD = 10.399$ ) vs. *high* ( $N = 19, M = 49.210, SD = 12.086$ ) attachment, combining both *low* and *medium* clusters from the previous analysis into the *non-high* range. In doing so, a significant main effect of *high* attachment security on self-reported altruism was found,  $F(1,56) = 6.732, p = .012$ . This was advantageous because initially there were too few participants within the *low* range of attachment; this would

have been cause for decreased statistical power. Upon further review, an interaction of *non-high* vs. *high* attachment security and political affiliation with self-reported altruistic behavior became apparent,  $F(2,56) = 4.721, p = .013$ .

### Discussion

Results of the present study do not support the hypothesis that attachment security is positively correlated with one's altruistic behaviors, nor do the results support the second hypothesis that females would demonstrate more altruistic behavior than males. However, results of a GLM do find that there is an evident main effect of *high* attachment security on self-reported altruism, as well as an interaction of *non-high* vs. *high* attachment security and political affiliation with self-reported altruistic behavior.

Further data analysis, again indicates that altruism is not related to the measured confounding variables of ethnicity nor parental income. As stated earlier, political party affiliation was found to correlate with altruism. Additional post hoc analysis reveals that strikingly, Republicans were more altruistic in the present study. This was unexpected because as noted previously by Lee et al. (2005), many exemplary altruists had liberal views on politics and the labor movement. A possible explanation for this lies in the fact that only 26.3 percent of the participants studied marked themselves as Republican. It is possible that this small percentage was simply just very altruistic; however, the uneven sample size makes it difficult to make a sound assessment.

Future research may find it worthy to note that all of the altruistic Republicans of the present study were also from households of relatively high parental income. One may therefore speculate that Republicans generally tend to be more economically comfortable. Finding oneself less threatened by financial instability, fortunate persons may be more likely to help others due to

the capability and resources to do so. In the same regard, persons of lower incomes may find themselves pressed to consider their own matters before finding the time to volunteer or money to donate. This follows the accepted adage, “You can’t help others until you help yourself”; not necessarily due to a lack of social consciousness, but simply due to unfortunate life stresses beyond one’s control.

It is also interesting that no significance was found in the present study between one’s ethnicity and altruism. As a study by Harris and Klingbeil (2001) found, a higher percentage of Anglo-surnamed individuals (97.3%) were more likely than Spanish-surnamed individuals (76.7%) to look up a phone number for an unknown confederate who called them randomly.

Concerning questions of sex and socioeconomic status (SES), Jessica Jenner (1982) conducted a mail survey of a national women’s volunteer organization ( $N = 292$ , ages 18-42) to examine whether social pressures and modern emphasis on the self (career-oriented goals) had decreased the volunteerism of upper-middle-class women. Results of the study indicate that these women generally did indeed still allocate a significant amount of time to volunteer, noting that altruism and self-actualization remained equally important motivators for their service.

Obviously, more than these few studies are needed to make any concrete conclusions, but they do provide some preliminary statistics into speculated theories and conditions of altruism. Nonetheless, as the present study suggests that there is no evident relationship between one’s level of attachment security alone, sex, ethnicity, nor parental income with self-reported altruism, future studies are absolutely needed to further any conclusions and to discuss and dismiss any potential confounding variables unforeseen by the present study.

It is not unlikely that potential limitations have had an affect on the present study. First and foremost, it is important to note that the sample studied consists of only undergraduate

students, most of whom are psychology or neuroscience majors. This small *convenience* sample does not include individuals from other age groups or even individuals of a similar age range who do not attend a private university. Therefore, the ability of these findings to generalize to the greater population (external validity), may be reduced. Moreover, had the sample size been larger, there would have been increased statistical power. Additionally, most participants (72.9%) were female; this predominance of sex is not equally representative and may very well have affected our analyses.

Perhaps most essential, the present study assessed only self-reported altruism, not actual behavior. This leaves an important gap in the evidence on behalf of actual altruistic helping; a person may feel compassionate for another's distress without truly helping at all (Batson, 1991). In fact, it is more than likely that the responses of some participants may even reflect *social desirability* aspects. Moreover, as was pointed out by a few participants, some items of the Self-Report Altruism scale (Rushton et al., 1981) were not applicable to everyone. For instance, "I have given another a ride in my car"; this is not possible for someone who does not have such a vehicle.

Another potential, yet very central limitation could be found in the Lipson-Parra Adult Attachment scale (1990), where participants were asked to select from a list of various attachment figures (*i.e.*, spouse, mother, nephew, friend, etc.) and refer to that person while answering the items. Because participants selected different attachment figures, the scale suffered in its consistency; one's relationship with their mother is certainly different from that of a friend. A more valid measure would have asked each participant to refer to the same type of attachment figure (*i.e.*, parental guardian). Lastly, participants in some of the laboratory sections

may have completed our study following three or four other studies. Such *fatigue effects* may have influenced the results of the current study.

It is recommended that future studies of this topic incorporate more applicable and objective measures, perhaps an altruism scale that is based on actual behavior rather than self-report. Accordingly, researchers must ensure that the different scales are internally valid (as that of our Self-Report Altruism scale was unknown) and accurately measure the same variable (are reliable). Again, future studies may consider observing various age groups as a means to ascertain any potential differences. It would be further intriguing to examine the relationships between altruism and other correlates such as religion, culture, and personality traits such as empathy.

Studies of altruism can have obvious and irrefutable implications in the volunteer and non-profit sectors of society. Such industries are driven by the altruistic vigor of socially concerned individuals. Knowing how to effectively market one's organizational aims to such humanitarian persons would be key to attracting the right people to a cause. Specifically, as with our study, political parties may be likely to campaign around certain altruistic issues in an effort to gain the support of potential constituents.

It is often wondered what traits could possibly stir such compassionate persons as Mother Theresa, whose selflessness has even warranted the invention of its own term, *exemplary altruism* (Lee et al., 2005). Clearly, there is much to be learned from studying the characteristics of these passionate volunteers, not just in terms of marketing for non-profit organizations, but most significantly, for ourselves, so that we may each discover just a little bit more about what propels humanity.

## References

- Batson, C. D. (1991). *The altruism question: Toward a social-psychological answer*. Hillsdale, NJ: Erlbaum.
- Chou, K. (2001). Effects of age, gender, and participation in volunteer activities on the altruistic behavior of Chinese adolescents. *The Journal of Genetic Psychology, 159*, 195-201.
- Eisenberg, N., & Mussen, P. H. (1989). *The roots of prosocial behavior in children*. Cambridge, UK: Cambridge University Press.
- Fletcher, T. D., & Major, D. A. (2004). Medical students' motivations to volunteer: An examination of the nature of gender differences. *Sex Roles, 51*, 109-114.
- Harris, M. B., & Klingbeil, D. R. (2001). The effects of ethnicity of subject and accent and dependency of confederate on aggressiveness and altruism. *The Journal of Social Psychology, 98*, 47-53.
- Jenner, J. R. (1982). Participation, leadership, and the role of volunteerism among selected women volunteers. *Journal of Voluntary Action Research, 11*, 27-38.
- Krueger, R. F., Hicks, B. M., & McGue, M. (2001). Altruism and antisocial behavior: Independent tendencies, unique personality correlates, distinct etiologies. *Psychological Science, 12*, 397-402.
- Lee, D. Y., Kang, C. H., Lee, J. Y., & Park, S. H. (2005). Characteristics of exemplary altruists. *Journal of Humanistic Psychology, 45*, 146-155.
- Lipson-Parra, H. B. (1990). Development and validation of the adult attachment scale: Assessing attachment in elderly adults.
- Mikulincer, M., & Shaver, P. R. (2005). Attachment security, compassion, and altruism. *Current Directions in Psychological Science, 14*, 34-38.

Rushton, J. P., Chrisjohn, R. D., & Fekken, G. C. (1981). The altruistic personality and the self-report altruism scale. *Personality & Individual Differences, 50*, 1192-1198.

Self-Report Altruism scale. Retrieved March 23, 2006, from [www.prenhall.com/divisions/hss/app/social/addchap4.html](http://www.prenhall.com/divisions/hss/app/social/addchap4.html).