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Subliminally Primed Social Exclusion's Effect on Reaffiliation Behaviors

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Subliminally Primed Social Exclusion's Effect on Reaffiliation Behaviors

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Abstract

The need to belong is as innate as our need for food or water (Maslow, 1943). When that need is threatened, people strive to reaffiliate with desired ingroups. They may act in uncharacteristic ways, or purchase items they would not normally purchase to appear more like the desired ingroup. In the present study, participants were subliminally primed with stimuli pilot-tested for social exclusion. The purpose of this research was to determine if subliminally-primed social exclusion affects participants' reaffiliation efforts with an ingroup. Participants watched a slideshow with pictures of Oklahoma City and Tulsa landmarks. Participants in the experimental conditions viewed another slideshow subliminally priming social exclusion with either pictures or words. Participants were told that they had $300 in fake money to donate to fictional charities based in Oklahoma City or Tulsa. The dependent variables were number of charities from each city donated to and amount of money donated to charities from each city. The researcher's hypothesis was not supported, but an examination of the means seems to indicate a small effect of the primes. A second study was conducted to gather additional information from the population, such as empathy, need to belong, and attitude toward giving to charities.

Keywords: social exclusion, subliminal priming, automaticity, networks, ingroup

Subliminally Primed Social Exclusion's Effect on Reaffiliation Behaviors

The need to belong and to be accepted is as innate as our need for food and water (Maslow, 1943). When our feeling of belonging is threatened, we may go to great lengths to reestablish ourselves within a desired social network (MacDonald & Leary, 2005). Abraham Maslow was one of the first people to identify the human need to belong to a group and to feel accepted (Maslow, 1943). However, Maslow does not emphasize how easily our belongingness needs can be threatened. An individual does not have to suffer direct ostracism to feel excluded; for instance, feeling that he or she does not have enough in common with a desired ingroup can threaten the need to belong (Hall & Crisp, 2008). When a person feels excluded from a desired ingroup, his or her overall well-being may suffer. One reason for this is that belongingness and loneliness are related, such that feeling excluded may increase the likelihood of loneliness (Mellor, Stokes, Firth, Hayashi, & Cummins, 2008). Lonely people often do not have a strong social network to whom they can turn in times of need; they may feel alone in the world, and this can have negative effects on mental health and life satisfaction (Mellor et al., 2008). Because of the dramatic impact that social exclusion, lack of belongingness, and loneliness can have on well-being, people are motivated to alleviate rejection when faced with it.

Reaffiliating with an Ingroup

Rejection or exclusion from a desired ingroup happens to everyone at some point. But it is how people respond to the rejection that determines the likelihood that they will regain previous social standing and inclusion in the group. When a person is excluded from a desired ingroup, especially when an undesirable outgroup is also cognitively salient or physically present, the person engages in social comparison (Hall & Crisp, 2008). The excluded person will compare the attributes they have with the attributes of the desired group. If they perceive

themselves as lacking in certain attributes, they will not self-categorize themselves as belonging to the desired group (Hall & Crisp, 2008). Social exclusion can therefore be self-imposed if a person feels that they do not live up to the standards of a desired ingroup.

Social comparison comes into play again when the excluded person attempts to reintegrate themselves with the desired group. They may be motivated to reduce the difference between themselves and the group. Spending money on activities or possessions associated with an ingroup is one way people attempt to integrate into the group (Mead, Baumeister, Stillman, Rawn, & Vohs, 2011). For instance, someone new to a country club and trying to fit in to the social atmosphere will not buy a '91 Honda Civic; a new Mercedes garners more respect from peers and draws attention to their sameness.

People use possessions as a way to communicate personal characteristics about themselves; in this way, our possessions are an extension of our selves (Mead et al., 2011). Because consumption choices often provide detailed information about the self, excluded people are still cautious in how they spend money; they must walk the fine line between acceptance and further rejection, and one wrong decision may tip them over the edge, out of the group. Excluded people weigh the costs and benefits of incurring financial strain in order to reaffiliate with a group; if they lack assurance that purchasing a specific product or service will engender acceptance from the group, they may be hesitant to risk further exclusion (Mead et al., 2011).

While spending money on products symbolically associated with an ingroup is intended to communicate solidarity, Maner, DeWall, Baumeister, and Schaller (2007) showed that it is not the product itself but rather the social implications of possession of the product. They reasoned that excluded people would seek out new friendships and would be more generous to new interaction partners with whom they believe future social interactions will occur. In the present

study, participants will have the opportunity to donate money to fictional charities located either in the participants' hometown or another city. The researcher hypothesizes that participants will donate more money to charities in their hometowns due to the possibility of future interaction with the charity and because they feel more connected to their hometown. This hypothesis is derived from the conclusions made by Maner et al. (2007) that people are more generous to others if the interaction could increase social standing.

Link Between Social and Physical Pain

When describing the feeling of interpersonal loss or rejection, people use phrases such as "heartbroken," "hurt feelings," and "crushed." We often use physical pain terms to describe social pain or rejection. Not only are the terms used to describe experiences of both physical and social pain similar, both types of pain may involve a common brain structure. The dorsal anterior cingulate cortex (dACC) is partly responsible for the perception of pain (Krill & Platek, 2009). The ACC tells the body how distressing the pain is, but provides no information about the intensity of the pain (Eisenberger & Lieberman, 2005). The ACC acts as a neural alarm system that alerts the body to threatening stimuli in the environment (Krill & Platek, 2009). When the body detects a disturbance that could threaten the person's well-being, either physically or emotionally, the ACC becomes activated and begins the process of taking action to mollify the threat of the stimulus. Anterior cingulate cortex activity increases when a person is excluded by a member of an ingroup, but decreases when excluded by a member of an outgroup (Krill & Platek, 2009). When people are excluded by someone from their own race, there is an associated increase in ACC activity because the rejection could hypothetically come from someone with shared genes (Krill & Platek, 2009).

Results of studies investigating the role of the ACC in response to physical pain suggest that it becomes active in the presence of unexpected painful experiences, whereas it is least activated in response to expected nonpainful stimuli (Eisenberger & Lieberman, 2005). This suggests that unexpected pain is especially painful, at least from a neurological standpoint. Conversely, when people are not told whether the stimulus will be painful or painless, ACC activity increases significantly, suggesting that the possibility of pain is itself painful (Eisenberger & Lieberman, 2005).

Evidence for the role played by the anterior cingulate cortex in the perception and neurological reaction to social pain has been found in studies using functional magnetic resonance imaging (fMRI), ablation, and social experimental methods. In human mothers, ACC activity increases when a mother hears an infant crying, an indication of social distance from a caregiver (Lorberbaum et al., 1999). Hearing the distress cries of young may motivate mothers to alleviate the distress caused by social isolation or loneliness.

The link between social and physical pain is evolutionarily significant (Eisenberger & Lieberman, 2005; MacDonald & Leary, 2005b). Both types of pain can signal the presence of a stimulus that can threaten survival: physical pain signaling tissue damage, and social pain signaling separation from the protective group. The purpose of physical pain is to alert the person to the danger so that steps can be taken to minimize the damage. The same is true of social pain; the pain of rejection acts as a learning mechanism to avoid future rejection (MacDonald & Leary, 2005b). When people experience the pain of rejection, they learn that the person who inflicted that pain cannot be trusted with their feelings and well-being, so the rejected person learns to avoid the rejecter. The knowledge may also generalize to other people,

such that the rejected person learns to avoid people with characteristics similar to the initial perpetrator.

Automaticity and the Function of the Unconscious

Automaticity is the mechanism through which a skill performed repeatedly can become automatic and occur without conscious consideration or control (Mather & Romo, 2007). An example is the differences between novice and experienced car drivers; the experienced driver does not have to think about every step to operate the car. This type of automaticity is goal-dependent and requires conscious, intentional thought initially in order to become automatic (Bargh, Schwader, Hailey, Dyer, & Boothby, 2012). A burgeoning focus is on a second type of automaticity, preconscious automaticity, which does not require a conscious skill acquisition phase in order to become an automatic process. Preconscious automaticity is typically generated from sensory or perceptual inputs, such as social behavior, embodied cognition, and goal pursuit (Bargh et al., 2012). Behavioral mimicry is one area in which preconscious automaticity may operate. Due to the perception-behavior link, merely perceiving a behavior is sufficient to elicit the behavior (Bargh et al., 2012). In this way, a behavior may become automatic and occur without conscious consideration or control, even when it has not been practiced. Mimicry behaviors increase following a social exclusion episode; when a person is excluded by an ingroup member, the person tends to imitate subsequent behaviors (Lakin, Chartrand, & Arkin, 2008). Unconscious mimicry increases feelings of closeness between the people, reducing the possibility of future rejection.

Another area that can benefit from a discussion of preconscious automaticity is motivation and goal pursuit. People can strive to achieve goals, changing their current state to a different one, without conscious awareness (Hassin, 2013). Unconscious goal pursuit is similar

to conscious goal pursuit. The outcomes are typically the same and both rely on attention and executive processes; the difference is that participants are not able to identify the goal towards which their behavior suggests they were striving (Bargh et al., 2012). Despite the person's unawareness of the primed goal motivation, tasks that require high-level executive functions used in conscious goal pursuit still suffer (Marien, Custers, Hassin, & Aarts, 2012). This indicates that awareness is not necessary for stimuli to either be consciously perceived or the purpose of the stimuli to be known for the stimuli to have an effect on behavior.

Subliminally Primed Concepts and Processes

Subliminal stimuli occur below the level of conscious awareness and are used to study unconscious processes that can affect behavior (Randolph-Seng & Mather, 2009). Awareness of stimuli may interfere with behavior because once awareness is achieved, the cognitive processes involved are altered. People resist influence of stimuli that may alter their behavior, thoughts, or feelings (Randolph-Seng & Mather, 2009), and the person may engage in corrective processes that prevent influence of the stimuli. However, subliminal stimuli can change a person's emotional state and behaviors, without their conscious awareness.

Subliminal stimuli can influence interpersonal evaluations and memory using either words or images. In one study, participants were subliminally presented with either happy or angry faces and were then shown the same faces with neutral expressions supraliminally and asked to rate each photo on the person's suitability for a job. The subliminally-presented happy faces were rated higher compared to the angry faces (Skandrani-Marzouki & Marzouki, 2010). Emotional information can be processed so rapidly that it influences our judgments of other people, often without us knowing why we are making those judgments. In another experiment, memory was negatively affected after subliminal presentation of words related to the elderly

(Dijksterhuis, Bargh, & Miedema, 2000). Words associated with the elderly activated the concept of "elderly" and all of the other concepts and behaviors often attributed to this population. However, this effect was only found if the participants were unaware of the presence of the prime words; if they believed they were being primed, the effect disappeared (Randolph-Seng & Mather, 2009). The activation of the concept "elderly" primed participants to behave in accordance with a stereotype: that elderly people have poor memory. A possible mechanism responsible for both supraliminal priming and subliminal priming is called spreading activation and occurs within cognitive, or neural, networks.

Priming and Spreading Activation

Primes do not have to be subliminal to alter behavior. Meyer and Schvaneveldt (1971) were two of the first researchers to show that response to words in a lexical decision task was faster when the simultaneously presented pairs of words were semantically related. In a lexical decision task, participants see a pair of words presented supraliminally but very fast. The task is to determine whether both words are real words. Meyer and Schvaneveldt found that this decision was faster for pairs of words that were related. In tasks when the participant is presented with either a word or a nonsense word preceded by another word, reaction times are improved when the target word is preceded by a semantically related word (Hill, Strube, Roesch-Ely, & Weisbrod, 2002). However this effect is short-lived; the time between prime word and target word, called stimulus onset asynchrony, must be very short, less than 400 ms, for the prime to improve decision performance for the target word (Hill et al., 2002).

Meyer and Schvaneveldt, however, did not believe their result was due to the meanings of each word being retrieved from memory; rather, they said that words that are commonly associated reside closer to each other in long-term memory. There is less distance between

associated words in the network, thereby decreasing response times for these words. If words are either not related or one of the words is a nonsense word, the distance between the pair is greater and the reaction times are longer (Meyer & Schvaneveldt, 1971). Meyer and Schvaneveldt hypothesized that this result was caused by a mechanism similar to spreading activation called spread of excitation. The idea behind both spreading activation and spread of excitation is that priming a concept node or a network using either a word or a picture causes associated nodes to become activated, and those nodes activate other nodes until the activation travels throughout the network. When distantly related nodes are activated by the initial stimulus, this node may affect subsequent tasks or thoughts.

This discussion of networks and spreading activation is reminiscent of Quillian's theory of semantic processing (Collins & Loftus, 1975). Quillian described spreading activation as the activation of nodes in a network that are connected to each other by different types of links (Collins & Loftus, 1975). As memory is searched, activation from the original node spreads to connected nodes. This spreading leaves an activation tag at the node that identifies that starting node and the node immediately before the tagged node. The process continues until an intersection with another tagged node is found. By tracing the intersecting nodes back through the network along their individual tags, a path is created back to the initially activated node. By this process, we see how a stimulus ultimately caused both of these nodes to become activated.

Other Theories of Semantic Processing

Spreading activation is a common explanation of priming phenomena in cognitive psychology. However, it is not the only proposed theory that attempts to explain why a stimulus can make other related concepts, words, or thoughts more available to the person. One such theory is merely an extension of Quillian's semantic processing theory (Collins & Loftus, 1975).

The extension adds several assumptions regarding local and global processing of stimuli and moves the theory away from the computer model and in the direction of neurological terms. The second proposed mechanism of priming is called activation at a distance (Nelson, McEvoy, & Pointer, 2003).

Extension of Quillian's theory. Collins and Loftus (1975) suggest four local assumptions to be added to Quillian's theory. The first assumption is that as activation from the first node travels through the network, its strength decreases. That means that a node that is nine nodes removed from the original node will not be activated as strongly as the node that is only two nodes removed. Therefore, concepts that are not directly related to the original concept will not be as strong either. The second assumption proposed by Collins and Loftus is that the longer a concept is activated, the longer it activates associated nodes. Activation starts at a single node but it spreads out to the other connected nodes at the same rate. The third local assumption is that activation of a concept decays over time and in the presence of intervening information. For this reason, it is difficult to prime multiple concepts simultaneously. The final local assumption is activation can come from different sources and it is the summation of the information from various sources intersecting at the same node that leads to the backtracking discussed previously to locate the node of origin.

The global assumptions of Quillian's extended theory concern the structure of memory, and it posits that there is a lexical memory for words and a separate memory for concepts (Collins & Loftus, 1975). The first assumption is that the more properties two concepts have in common, the more links there are between them. These links are organized along a line of similarity. Therefore, one concept may be associated with several other concepts and the distance between these concepts may differ. The concept of "bird" is associated with both robin

and ostrich. But the associations between "bird" and robin is likely stronger than the association with ostrich because the typical concept of bird is more similar to robin. The second assumption of global processing is that names of concepts are stored in lexical memory according to phonemic similarity (Collins & Loftus, 1975). That means that words that sound similar are categorized together. These concept names are associated with nodes in the network. The last assumption is that people can control whether they prime the semantic network (words with similar meaning), the lexical network (words that look similar), or both.

Activation at a distance. One of the assumptions of spreading activation is that the association travels from the target, to the associated concepts, and then back to the original target. Nelson, McEvoy, and Pointer (2003) disagree with this assumption. They explained priming effects using the activation-at-a-distance model. This model states that the connections between the target and an associated concept or word and the connections between words associated with the target all serve to increase the activation of the target. If two words are not presented in conjunction with the target word, the target word will still be activated faster because of the presentation of the other two words. The target's overall strength is determined by how many connections it has with associates. The difference between activation at a distance and spreading activation is that the activation-at-a-distance model does not require that the associations lead back to the target to improve recall and recognition of the target (Nelson et al., 2003). It emphasizes the connections throughout the network and the role they play in summarily improving recall, recognition, and response to the target stimuli. The target's overall strength in the conceptual network is determined by the number of connecting associates.

Priming Social Exclusion

The role of priming, either subliminal or supraliminal, is that it activates the initial node. In the present study, both a network and a concept will be activated. The participants' thoughts and feelings about their hometowns will be activated by photos; it is hypothesized that the photos will activate the participants' ingroup network associated with their hometowns. In addition to priming participants to think about their hometown, some participants will be subliminally primed to think about the concept of social exclusion, making the nodes associated with the concept more salient and accessible. The concept of social exclusion will be primed directly using words associated with exclusion, and it is hypothesized that the concept will be indirectly primed using photographs depicting exclusion.

Theories of spreading activation in semantic networks provide evidence that subliminal priming will trigger a node and cause activation of related nodes. The activation of the nodes related to the network of ingroup affiliation based on hometown and the concept of social exclusion is hypothesized to influence charitable funds distribution. The researcher predicts that participants subliminally primed with social exclusion will donate more money to fictional charities based out of their hometown compared to controls.

Pilot Study

The pilot study was conducted to identify words and pictures that were most highly associated with social exclusion or loneliness. The words and pictures were used as the stimuli in Study 1.

Method

Participants. Fifty-four students from the General Psychology courses at the University of Central Oklahoma served as participants. Participants signed up for the study through Sona

Systems and were given the web address for the survey. The students received course credit for their participation in the study.

Materials. The researcher used Qualtrics Survey Software online to present items. Seventeen pictures from the International Affective Picture System database and fifty-one words from the Affective Norms for English Words database were the items the participants rated. The pictures the participants rated were chosen by the researcher because they seemed to reflect exclusion to that researcher. All items were rated on a seven-point Likert-type scale.

Procedure. Participants first read the online consent form and typed their name into a box, which served as a signature (See Appendix A). The participants rated the pictures first, which were presented one at a time. The instructions stated "Please rate the following image on how much you think it reflects social exclusion or loneliness, 1 meaning 'does not reflect exclusion or loneliness at all' and 7 meaning 'strongly reflects exclusion or loneliness.'" The participants had the option to skip items.

The words were presented last in a randomized order on the same page (See Appendix B). The instructions stated " Please rate the following words on how much you think they reflect social exclusion or loneliness, 1 meaning 'does not reflect exclusion or loneliness at all' and 7 meaning 'strongly reflects exclusion or loneliness.'" The same Likert-type scale used for the pictures was also used for the words. The participants had the option to skip items.

Results

The mean ratings for the pictures and words were used to select stimuli. The top three rated items were selected. The selected pictures were Crying Girl (M = 5.91, SD = 1.32), Excluded Boy (M = 5.60, SD = 1.35), and Crying Boy (M = 5.07, SD = 1.63). The chosen words

were Lonely (M = 6.63, SD = .97), Rejected (M = 6.46, SD = .93), and Isolation (M = 6.44, SD = .90). See Table 1 for means and standard deviations of all words included in study.

Study 1

This study tested the hypothesis that participants who are subliminally primed with words or pictures associated with social exclusion will donate more money to charities located in or near their hometowns. The hometowns were supraliminally primed with pictures of landmarks and urban environments.

Method

Participants. Forty-eight students from the General Psychology courses at the University of Central Oklahoma served as participants. The students answered prescreening questions through Sona Systems to determine their hometown. The students received course credit for their participation in the study.

Materials. The researcher used PowerPoint to display the city pictures. Stimuli included 10 photos representing Oklahoma City and Edmond and 10 photos representing Tulsa. Pictures from other large cities in the United States, Canada, and France served as filler images. All photographs of urban environments and landmarks were selected from search engine results after requesting images from Oklahoma City, Tulsa, Edmond, and the filler cities. A total of 29 urban setting and landmark photos were used. Each picture was labeled with the city name at the top of the screen.

Three pictures from the International Affective Picture System database associated with exclusion, determined from the results of the pilot study, were used to subliminally prime participants in the first experimental condition. In the second experimental condition, the participants were presented with three words from the Affective Norms for English Words

database associated with social exclusion, based on results from pilot study. Subliminal stimuli were presented using DirectRT. Participants in the control condition were not primed and proceeded directly to the donation task. All participants had the opportunity to donate $300 in fake money to fictional charities (See Table 2) located in the target cities, Oklahoma City and Tulsa.

Design and data analysis. A multivariate analysis of variance (MANOVA) was performed on the data to control for Type I error. The independent variable was primed social exclusion with two levels, words or pictures. The quasi-independent variable was participant hometown. The dependent variables were number of charities donated to in Oklahoma City and Tulsa, and amount donated to charities in Oklahoma City and Tulsa. Therefore, there were four dependent variables.

Procedure. After signing the consent form (See Appendix C), all participants viewed the labeled city pictures via PowerPoint. Each image was presented for 5 s. Participants in the experimental conditions viewed another slideshow subliminally presenting words or pictures associated with social exclusion. A fixation point was presented for 300 ms (Skandrani-Marzouki & Marzouki, 2010). A forward mask picture was presented for 20 ms, followed by the priming picture for 50 ms. The prime picture was backward masked for 20 ms. The next screen asked the participant to press the spacebar when ready to continue and the next sequence of fixation point-mask-picture-mask began. Word priming was conducted in the same fashion, with the words replacing the pictures in the priming slideshow. The masks were lexical symbols (e.g., XXXXXXX; &&&&&&&).

Participants in the control condition immediately proceeded to the donation task after viewing the city pictures. All participants were informed that they had $300 in fake money to

donate to charities. They did not have to spend all of the money but they could only donate $100 to any single charity. Participants were given a list of fictional charities from which to choose (See Appendix D). They indicated on the paper which charities they wanted to donate to and how much they would like to donate. On the back of the charity list, the participants wrote the name of their hometown or where they grew up. After the participant finished selecting charities and identified his or her hometown, the experimenter debriefed them and thanked them for their participation.

Results

After selecting cases in which the hometown was Oklahoma City, Edmond, or a nearby town, analysis was conducted on 35 participants. These analyses yielded non-significant results. However, while non-significant, the means seem to indicate that the primes had some effect on both the number of charities participants donated to in Oklahoma City and the amount of money they donated to charities in Oklahoma City. The number of charities donated to was slightly higher but non-significant for the Pictures condition (M = 3.42, SD = 1.24) and the Words condition (M = 3.64, SD = 1.12) compared to the Control condition (M = 3.08, SD = 1.08). The amount of money donated to charities in Oklahoma City showed a similar trend, especially comparing the Words condition (M = 194.09, SD = 61.76) with the Control condition (M = 182.92, SD = 49.33). A comparison of the Pictures condition (M = 182.08, SD = 32.22) with the Control condition did not have the same pattern, indicating the word primes may have been more effective than the picture primes.

Discussion

It was hypothesized that participants in the exclusion conditions would donate more money to charities from their hometown compared to participants in the control condition. The

hypothesis was not supported. Participants were not significantly more likely to donate more money to charities located in or near their hometowns in the exclusion conditions. The non-significant results suggest that subliminally primed social exclusion does not have a marked effect on reaffiliation behaviors, specifically, willingness to donate more money to charities that the person may interact with at some point.

However, non-significant results may also indicate that the priming procedure was not strong enough. The researcher believes that slight changes to the methodology could increase the effect of the priming procedure. In the Word priming condition, more words and a longer priming phase may have decreased the standard deviation and increased the effect of the primes. A shorter interval between the subliminal priming phase and the charity selection task may also increase the primes' effect. Improved picture quality for the photographs of hometowns is recommended; the images may have been distorted by the computer such that they were not clear enough to prime thoughts and emotions toward the hometown. It would also be important to know which charity participants chose first because it would likely be the selection most affected by the primes. Another possibility is that the participants no longer feel connected to their hometowns, such that their hometowns were not a desirable ingroup and they were not motivated to contribute money to those towns.

In future studies, researchers should select groups that are relevant to the population, college-age participants in this study; for instance, college-age students may feel more connected to their university's sports teams, local hangouts, or on-campus organizations to which they belong. Future research should also include more subliminal priming stimuli and possibly use a more salient ingroup from which to exclude the participants. A technique for reducing the time between priming and charity selection should also be devised. For example, a charity name

could be displayed between each subliminal prime, with the charities counter-balanced between conditions. This change would allow the participant to make a decision about individual charities without seeing other options. Reaction times could be measured using this technique. Reaction times could be used to measure effect of primes; faster reaction times to charities associated with groups to which the participant belongs in the exclusion conditions could indicate an effect of priming.

Study 2

This study was conducted to gather additional information from participant population regarding attitudes toward charities in general, charities used in Study 1, and other measures.

Method

Participants. Ninety-five students from the General Psychology courses at the University of Central Oklahoma served as participants. Participants received course credit for their participation.

Materials. The researcher used Qualtrics Survey Software online to present survey items. The participants were presented with nine surveys. The surveys included the Adapted Self-Report Altruism Scale (Rushton, 1981 [original version]; Witt & Boleman, 2009 [adapted version]; Appendix F), Attitudes Toward Charitable Giving Scale (Furnham, 1995; Appendix G), Toronto Empathy Questionnaire (Spreng, McKinnon, Mar, & Levine, 2009; Appendix H), Interpersonal Expectancy Scale (IES; Gill & Mather, 2008; Appendix I), Motivation to Avoid Negative Interpersonal Bias Scale (MANIB; Gill & Mather, 2008; Appendix J), Need to Belong Scale (NTB; Leary, Kelly, Cottrell, & Schreindorfer, 2005; Appendix K), Short Dark Triad (Paulhus & Jones, 2011; Appendix L), and the Intrinsic/Extrinsic-Revised (I/E-Revised; Gorsuch & McPherson, 1989; Appendix M).

The Attitudes Toward Charitable Giving Scale is divided into five separate factors; these factors include inefficiency of charitable giving (5 questions), efficiency of charitable giving (4), cynical giving (3), altruistic giving (2), and purpose of charity (3). The IES is divided into three factors; these factors are negative (12), positive (12), and an overall score. The Short Dark Triad is divided into three factors; these factors are Machiavellianism (10), Narcissism (9), and Psychopathy (9). The I/E-Revised is divided into three factors; these factors include intrinsic religion (8), extrinsic-social religion (3), and extrinsic-personal religion (3).

In addition to these scales, the researcher asked how much the participant liked each of the charities used in Study 1, how certain they were of their opinion about the charity, and how likely they would be to donate to each charity (See Appendix N). The researcher also requested information about the participants' history of charitable giving by asking how much time and money the participants had given to charities in the last month (See Appendix O).

Design and data analysis. Each scale was scored and the mean, median, and standard deviation were obtained for each. A correlation matrix comparing the scores on all of the scales was created. The ratings for each of the 10 charities were averaged, and the mean, median, standard deviation, range, minimum, and maximum were obtained. Amount of time and money the participants donated in the last month was also averaged, and the median and standard deviation were calculated. Correlations were also conducted between the amount of time and money donated and the attitude ratings for the charities.

Procedure. Participants signed up to take the study and received the study link through Sona Systems. After reading and electronically signing the online consent form (See Appendix E), the participants completed the series of questionnaires through the website Qualtrics.com.

Each survey was contained in a separate block, and the blocks were randomized for each participant to reduce fatigue effects on the later surveys. The survey had a total of 171 questions.

Results

Descriptive statistics were calculated for each scale. See Table 3 for means and standard deviations for each scale and subscale.

See Table 4 for correlations between scales. See Table 5 for descriptive statistics on time and money donated in the last month. Ratings for the charities included how much the participants liked the charity, how certain they were of their opinion, and how likely they would be to donate to the charity. See Table 6 for descriptive statistics for charity attitude ratings. Correlations between time and money donated, and attitude ratings for the charities used in Study 1 can be found in Table 7.

Discussion

Altruism was positively correlated with MANIB. This correlation suggests that people who are more likely to offer help without expecting anything in return are also more likely to give other people the benefit of the doubt in most situations. Altruism positively correlated with IES positive, suggesting that those who help with few strings attached also tend to see other people in a positive light; they expect the best from other people which may explain why they are more willing to help in times of need. Altruism was positively correlated with intrinsic religion. Intrinsic religion is religion for religion's sake; it is not a means to an end but an end in itself (Allport & Ross, 1967). The correlation between intrinsic religion and altruism suggests that those individuals who are more likely to live their religion are more likely to help others. The correlation between altruism and empathy suggests that if a person can take another person's perspective, they will be more likely to offer aid.

Altruism was negatively correlated with inefficiency of giving. This correlation indicates that if a person does not believe charities actually help those they claim to help, the person will be less likely to help unless they also benefit. Altruism was negatively correlated with Machiavellianism. Machiavellianism is characterized by manipulative behaviors that are self-serving; a person who displays this trait may show little regard for the feelings or well-being of others if their actions lead to attainment of their goal (Jonason, Webster, Schmitt, Li, & Crysel, 2012). It stands to reason that if a person is willing to help without an expectation of return, they will be less likely to believe that the end justifies any means. Similarly, altruism was negatively correlated with Psychopathy. People who exhibit psychopathic tendencies, such as antisocial behaviors, lack of empathy, and shallow affect are likely the exact opposite of those people who act altruistically.

Efficiency of charitable giving was positively correlated with MANIB. People who believed that charities help those whom they claim to help were also more likely to avoid judging other people harshly; they may regard charities in the same way they do people: they want to believe the best of the charity. Efficiency of giving was positively correlated with IES positive, which is also related to having a generally positive regard for other people. Efficiency of charitable giving was positively correlated with altruistic giving. People who believe that charities are effective are also more likely to believe that giving to charities does not require reciprocation on the charity's part.

Empathy was positively correlated with MANIB, suggesting that people who take others' perspectives also believe the best of others; they are motivated to avoid seeing the negative characteristics of other people. Similarly, empathy was positively correlated with IES total; it may be more difficult for people who can take the other person's perspective to think the worst of

them. These correlations suggested that a person who empathizes with others, can understand another person's viewpoint, may be more likely to cut people some slack when they make a mistake.

Conversely, empathy was negatively correlated with IES negative. People who have a negative interpersonal expectancy expect people to take advantage of others given the chance, expect them to fall through on their commitments, and expect them not to take responsibility for mistakes. These beliefs are likely mutually exclusive to seeing situations from another person's perspective. Empathy was also negatively correlated with inefficiency of giving. People who believe that charitable giving is inefficient think that charities are waste of time and money and believe that a charity is not the best way to help those in need. People who score highly on this construct may not empathize with the people who are helped by the charities, or they may not have ever need assistance so it is more difficult for them to see the value in charities. Empathy was negatively correlated with cynical giving. People with a cynical view of charities believe that some people only give to them to allay their own guilty consciences or have ulterior motives in their actions. Finally, empathy was negatively correlated with Machiavellianism and psychopathy. A higher score on empathy was related to lower scores on both Machiavellianism and psychopathy, indicating that the ability to empathize with others is associated with lower tendencies toward self-serving, anti-social, or manipulative behaviors. The correlations discussed here are consistent with what would be expected from a normal population, indicating that the subject pool from which the participants from Study 1 were drawn was not different from a larger, more diverse, non-clinical population.

For amount of money donated in the last month, attitude certainty measures were a better predictor compared to likeability and likelihood of donating for some of the charities; the more

certain participants were of their attitudes toward select charities, the more likely they were to have donated money to a charity. Time was correlated with only a few attitude measures for the charities, and it was typically negatively correlated, specifically that the more they like a charity, the less likely they were to have donated time to a charity in the last month.

General Discussion

The purpose of these studies was to examine one behavior that was hypothesized to be used as a means to reaffiliate with a group after being excluded: donating to a charity in an area personally relevant and possibly important to the person. When a person is excluded from a group, they are motivated to prove their worth to themselves and to others. The person is also motivated to alleviate the perceived pain caused by the exclusion or rejection. The researcher hypothesized that a participant primed to think about exclusion would respond in a way similar to a person who had actually been excluded, namely, that the person would attempt to realign themselves with a group that had been important to them.

The first study tested the hypothesis that subliminally priming a person to think about being excluded would cause them to give money to a charity that is in an area they are familiar with and may help people similar to themselves. People want to feel like they are a part of something, and if they have been excluded, they are especially vulnerable to future rejection. This threat to their belongingness motivates them to take actions to reestablish a connection with a group.

Study 1 can imply several things about people. First, subliminally priming people with social exclusion may not be enough to affect behavior. If a person is not actually excluded, they may have no desire to reach out to a group or prove that they can be a valuable member of that group. Therefore, subliminally priming exclusion may not be strong enough to activate thoughts,

feelings, and reactions required to counteract the slight. Another possibility is that priming could work, but the presentation of the primes should be longer and there should be better measurement of which charities participants select first. As all of the participants were college-age students, it could also be possible that a better reaffiliation behavior for this group would be spending money on possessions or, especially, activities. Shared experiences are idle situations in which to build connections. Donating to a charity may not be an investment that a college student would find worthwhile in the face of rejection by a peer group.

The first study may also inform ideas about how people adjust to leaving a group and establishing themselves in a new one. The participants may not have felt a connection with their hometowns anymore, because as new college students, they may have new connections with their peers; their hometown may no longer be as important to them (Cacioppo et al., 2000; Corsano, Majorano, & Champretavy, 2006). People must be flexible in their social groups; it is not evolutionarily beneficial to strive after groups that no longer serve the individual's best interests or that contain members that are unlike the person's current peer group. As we mature, we must learn to expand our social networks to include a variety of people; maintaining a social network of only a single group can be dangerous because of the ramifications of exclusion from that group. Humans must have a diversity of groups they can reach out to depending on their current needs.

The second study measured possible characteristics in the participant pool that could have been related to the likelihood of giving to charities, such as altruism, empathy, and how effective participants believed charities to be at accomplishing their supposed goals. The specific scales used were selected because the researcher needed to know whether there was any reason to believe that participants would be unlikely to donate time or money to a charity, which there was

not. The study was also used to determine whether people would consider donating to the specific charities used in the first study, regardless of whether they were primed with exclusion. This study showed that college students in this population have some altruistic and empathetic beliefs that theoretically should be related to the likelihood of charitable giving. Also, people wanted to believe the best of both other people and charities in general. Based on the results from the second study, it can be claimed that given the right motivation and opportunity, people would likely give to a cause in which they believe. However, it is important to remember that people must adapt to changes in their social environment and not devote resources to people or groups that no longer want them or that no longer serve their purposes.

Regardless of the way a person attempts to recover from an exclusion experience, it is important to their mental and physical health that they do something. Continued feelings of loneliness, rejection, or isolation can contribute to depression, hopelessness, and possibly suicide (Van Orden et al., 2010). People are designed to live in community with each other; we are social creatures who need a group to survive and thrive to our optimum level. We must belong to a social group that we can rely on, and that can rely on us, to be fully human.

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Table 1

Means and Standard Deviations for Pilot Study Words

	M	*SD*		*M*	*SD*
Affair	3.51	1.95	Isolation	6.44	0.90
Alien	5.26	1.60	Loneliness	6.63	1.00
Anxiety	3.50	1.51	Lonely	6.63	0.97
Anxious	3.21	1.55	Loser	5.73	1.35
Avoid	4.98	1.76	Neglect	6.16	1.34
Banish	5.90	1.62	Nervous	3.04	1.45
Betray	4.36	1.82	Pessimism	3.74	1.66
Criticism	4.14	1.53	Prison	5.24	1.56
Cruel	4.58	1.63	Punish	3.77	1.69
Defeated	4.05	1.73	Rejected	6.46	0.93
Detach	5.44	1.34	Rejection	5.94	1.57
Detached	5.14	1.77	Remove	4.99	1.97
Discouraged	3.86	1.65	Ridicule	5.12	1.63
Distressed	3.82	1.78	Sad	4.78	1.67
Embarrass	4.22	1.81	Sadness	4.95	1.70
Embarrassed	4.35	1.64	Shame	4.55	1.72
Embarrassment	4.21	1.89	Shamed	4.56	1.61
Expel	5.17	1.78	Smirk	2.91	1.83
Flaw	3.95	1.92	Sneer	3.6	1.75
Forbid	4.35	1.78	Taunt	4.71	1.87
Frown	3.58	1.48	Tease	4.77	1.66
Frustration	3.31	1.55	Timid	4.04	1.58
Helpless	5.04	1.70	Uncomfortable	3.63	1.61
Hinder	2.98	1.34	Uneasy	3.21	1.53
Ignore	5.67	1.50	Useless	5.16	1.73
Inferior	4.69	1.59			

Table 2

Fictional Charities

1	Oklahoma City Lion's Club
2	Oklahoma City's Child Outreach
3	Oklahoma City Chapter of Bread and Water for Africa
4	Tulsa Committee of the Deaf
5	Eco-Equip of Tulsa
6	Tulsa Helping Hands
7	Tulsa Community Foundation for the Blind
8	Tulsa Cancer Society
9	Child Abuse Intervention Fund of Oklahoma City
10	Alexi's House--OKC

Table 3

Means and Standard Deviations for Study 2 Scales

	M	*SD*
Altruism	51.000	8.554
Empathy	46.000	6.832
MANIB	1.667	.866
Need to Belong	33.000	4.274
Attitudes Toward Giving		
Inefficiency	14.000	3.069
Efficiency	13.000	2.081
Cynical giving	10.000	1.732
Altruistic giving	6.000	1.175
Purpose of charity	9.000	1.784
IES		
Positive	45.000	7.347
Negative	44.000	7.566
Total	85.000	11.603
Short Dark Triad		
Machiavellianism	29.000	4.855
Narcissism	27.000	4.482
Psychopathy	19.000	5.365
I/E-Revised		
Intrinsic	26.000	5.764
Extrinsic-Social	7.000	2.363
Extrinsic-Personal	10.000	2.590

Table 4

Significant Correlations Among Scales

	MANIB	iesneg	iespos	iestot	ineffchargiv	effchargiv	cyngiv	altgiv	purpchar
MANIB		-.270*	.279**	.351**	-.370**	.270*	-.242*		
iesneg				-.786**	.416**		.424**		
iespos				.762**	-.245*	.303**	-.225*	.421**	.295**
iestot					-.441**	.293**	-.441**	.230*	.258*
ineffchargiv						-.245*	.406**		
effchargiv								.294**	.209*
cyngiv								-.227*	
altgiv									
purpchar									
Altruism									
Mach.									
Narc.									
Psycho.									
Relig_Intrinsic									
Relig_ExSocial									
Relig_ExPersonal									
NTB									
Empathy									

	Altruism	Mach.	Narc.	Psycho.	Relig_Intrinsic	Relig_ExSocial	Relig_ExPersonal	NTB	Empathy
MANIB	.364**	-.493**		-.530**					.395**
iesneg		.476**							-.276*
iespos	.291**	-.293**		-.298**			.237*		
iestotal	.319**	-.491**		-.246*			.237*		.323**
ineffchargiv	-.248*	.363**		.236*					-.414**
effchargiv									
cyngiv		.231*							-.321**
altgiv									
purpchar						.324**			
Altruism		-.410**		-.432**	.319**				.585**
Mach.			.266*	.526**					-.334**
Narc.							.259*		
Psycho.									-.497**
Relig_Intrinsic							.222*		
Relig_ExSocial							.313**		
Relig_ExPersonal								.231*	
NTB									
Empathy									

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Table 5

Descriptive Statistics for Time and Money Donated in the Last Month

	M	Median	*SD*	Minimum	Maximum
Money Donated (dollars)	17.22	.00	34.873	0	200
Time Donated (hours)	3.79	.00	7.635	0	40

Table 6

Descriptive Statistics for Charity Attitudes

	M	*SD*	N
Lion's Club			
Likeability	5.32	1.527	91
Certainty	3.71	2.260	79
Likelihood of donating	3.61	2.098	88
Child Outreach			
Likeability	6.30	1.649	92
Certainty	4.94	2.398	87
Likelihood of donating	4.88	2.366	91
Bread and Water for Africa			
Likeability	5.93	1.914	91
Certainty	4.81	2.485	86
Likelihood of donating	4.46	2.396	91
Committee of the Deaf			
Likeability	5.92	1.881	91
Certainty	5.08	2.617	84
Likelihood of donating	4.46	2.326	89
Eco-Equip			
Likeability	4.67	1.588	88
Certainty	3.72	2.101	76
Likelihood of donating	3.26	1.941	80
Helping Hands			
Likeability	5.82	1.781	89
Certainty	4.85	2.573	82
Likelihood of donating	4.64	2.344	85
Community Foundation for the Blind			
Likeability	5.88	1.728	90
Certainty	4.98	2.469	85
Likelihood of donating	4.69	2.198	89
Cancer Society			
Likeability	6.98	1.779	92
Certainty	6.02	2.624	87
Likelihood of donating	5.93	2.362	92
Child Abuse Intervention Fund			
Likeability	6.96	1.738	91
Certainty	6.04	2.603	91
Likelihood of donating	6.13	2.368	92
Alexi's House			
Likeability	4.85	1.521	87
Certainty	3.90	2.222	77
Likelihood of donating	3.72	2.081	81

Table 7

Significant Correlations Between Time and Money Donated and Attitude Ratings for Charities

	LionCertainty	LionDonate	BreadLike	BreadCertain	BreadDonate	EcoDonate	HandsCertain	CancerLike	AlexiCertain	AlexiDonate
Money	.223*	.254*		.224*	.278**		.253*		.280*	.268*
Time			-.231*			.275*		-.222*		

**Correlation is significant at the 0.01 level (2-tailed)

*Correlation is significant at the 0.05 level (2-tailed)

Appendix A

UNIVERSITY OF CENTRAL OKLAHOMA
INFORMED CONSENT FORM

Research Project Title: Rating the Social Nature of Words and Pictures
Researcher(s): Erin McReynolds

A. Purpose of this research: This research will measure ingroup-outgroup categorization and charitable-giving habits.
B. Procedures/treatments involved: Participants will rate a series of words and pictures.
C. Expected length of participation: 15 minutes
D. Potential benefits: Course credit for the participant. The research will add to the knowledge of intergroup relations.
E. Potential risks or discomforts: The words and pictures are intended to elicit feelings of social exclusion and rejection. Participants will be rating words and pictures that may trigger some uncomfortable, negative emotions.
F. Medical/mental health contact information (if required): If you would like to visit with someone regarding sensitive or special concerns about this project or other issues please feel welcome to visit the UCO Student Counseling Center at (405) 974-2215 or http://www.uco.edu/student_counseling
G. Contact information for researchers: Erin McReynolds, emcreynolds@uco.edu, Dr. Robert Mather, rmather@uco.edu
H. Contact information for UCO IRB: For questions regarding your rights as a subject, contact the UCO Institutional Review Board, (405) 974-5497, irb@uco.edu.
I. Explanation of confidentiality and privacy: Your responses will be completely anonymous and the results will be reported as group means. Data will be stored in a locked file and password protected computer files. The data will only be available to the research team members and will be shredded and deleted five years after publication.
J. Assurance of voluntary participation: Your participation is completely voluntary and you have the right to withdraw from the study at any time without penalty or to refuse to answer questions.

AFFIRMATION BY RESEARCH SUBJECT

I hereby voluntarily agree to participate in the above listed research project and further understand the above listed explanations and descriptions of the research project. I also understand that there is no penalty for the refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty. I acknowledge that I am at least 18 years old. By typing my name below, I acknowledge that I have read and fully understand this informed consent form. If I want a copy of this form, I should print it before I type my name.

Appendix B

Please rate the following 51 words on how much you think they reflect exclusion or loneliness. 1 = Not at all, 4 = Moderately, 7 = Strongly.

Affair
Alien
Anxiety
Anxious
Avoid
Banish
Betray
Criticism
Cruel
Defeated
Detach
Detached
Discouraged
Distressed
Embarrass
Embarrassed
Embarrassment
Expel
Flaw
Forbid
Frown
Frustration
Helpless
Hinder
Ignore
Inferior
Isolation
Loneliness
Lonely
Loser
Neglect
Nervous
Pessimism
Prison
Punish
Rejected
Rejection
Remove
Ridicule
Sad
Sadness

Shame
Shamed
Smirk
Sneer
Taunt
Tease
Timid
Uncomfortable
Uneasy
Useless

Appendix C

UNIVERSITY OF CENTRAL OKLAHOMA
INFORMED CONSENT FORM

Research Project Title: Charitable Giving
Researcher: Erin McReynolds

A. Purpose of this research: This research will measure perceptions of urban environments and charitable-giving habits.

B. Procedures/treatments involved: Participants will view slideshows and then have the opportunity to donate fake money to charities.

C. Expected length of participation: 30 minutes

D. Potential benefits: Participation is worth one course credit for the participant. The research will add to the knowledge of intergroup relations.

E. Potential risks or discomforts: There will be no harm or discomfort anticipated in the research greater than what is ordinarily encountered in daily life or during routine physical examinations, psychological examinations or tests. Some experiments expose participants to stimuli of which they are not aware. In such cases, participants will always be fully debriefed at the conclusion of the experiment.

F. Medical/mental health contact information (if required): If you would like to visit with someone regarding sensitive or special concerns about this project or other issues please feel welcome to visit the UCO Student Counseling Center at (405) 974-2215 or http://www.uco.edu/student_counseling

G. Contact information for researchers: Erin McReynolds, emcreynolds@uco.edu, Dr. Robert Mather, rmather@uco.edu

H. Contact information for UCO IRB: For questions regarding your rights as a subject, contact the UCO Institutional Review Board, (405) 974-5497, irb@uco.edu.

I. Explanation of confidentiality and privacy: Your responses will be completely anonymous and the results will be reported as group means. Data will be stored in a locked file and password protected computer files. The data will only be available to the research team members.

J. Assurance of voluntary participation: Your participation is completely voluntary and you have the right to withdraw from the study at any time without penalty or to refuse to answer questions.

AFFIRMATION BY RESEARCH SUBJECT

I hereby voluntarily agree to participate in the above listed research project and further understand the above listed explanations and descriptions of the research project. I also understand that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty. I acknowledge that I am at least 18 years old. I have read and fully understand this Informed Consent Form. I sign it freely and voluntarily. I acknowledge that a copy of this Informed Consent Form has been given to me to keep.

Research Subject's Name _____

Signature: _____

Date: _____

Appendix D

Following is a list of charities. You have $300 in fake money. Your task is to decide to which charities you would like to donate the money. You do not have to donate all of the money and you do not have to donate to all of the charities, but you can only donate $100 to any single charity. Write on the line after each chosen charity how much money you would like to donate.

Oklahoma City Lion's Club _____

Oklahoma City's Child Outreach _____

Oklahoma City Chapter of Bread and Water for Africa _____

Tulsa Committee of the Deaf _____

Eco-Equip of Tulsa _____

Tulsa Helping Hands _____

Tulsa Community Foundation for the Blind _____

Tulsa Cancer Society _____

Child Abuse Intervention Fund of Oklahoma City _____

Alexi's House--OKC _____

(on back) Your Hometown Name _____

Appendix E

UNIVERSITY OF CENTRAL OKLAHOMA
INFORMED CONSENT FORM

Research Project Title: Attitude Scales
Researcher(s): Erin McReynolds

A. Purpose of this research: This research will measure attitudes toward charitable giving and other constructs.

B. Procedures/treatments involved: Participants will take a series of questionnaires on Qualtrics.com.

C. Expected length of participation: 60 minutes

D. Potential benefits: Course credit for the participant. The research will add to the knowledge of intergroup relations.

E. Potential risks or discomforts: There will be no harm or discomfort anticipated in the research greater than what is ordinarily encountered in daily life or during routine physical examinations, psychological examinations, or tests.

F. Medical/mental health contact information (if required): If you would like to visit with someone regarding sensitive or special concerns about this project or other issues please feel welcome to visit the UCO Student Counseling Center at (405) 974-2215 or http://www.uco.edu/student_counseling

G. Contact information for researchers: Erin McReynolds, emcreynolds@uco.edu, Dr. Robert Mather, rmather@uco.edu

H. Contact information for UCO IRB: For questions regarding your rights as a subject, contact the UCO Institutional Review Board, (405) 974-5497, irb@uco.edu.

I. Explanation of confidentiality and privacy: Your responses will be completely anonymous and the results will be reported as group means. Data will be stored in a locked file and password protected computer files. The data will only be available to the research team members.

J. Assurance of voluntary participation: Your participation is completely voluntary and you have the right to withdraw from the study at any time without penalty or to refuse to answer questions.

AFFIRMATION BY RESEARCH SUBJECT

I hereby voluntarily agree to participate in the above listed research project and further understand the above listed explanations and descriptions of the research project. I also understand that there is no penalty for the refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty. I acknowledge that I am at least 18 years old. By typing my name below, I acknowledge that I have read and fully understand this informed consent form. If I want a copy of this form, I should print it before I type my name in the box below.

Appendix F

Adapted Self-Report Altruism Scale (Rushton, 1981)

How often would you exhibit the following behaviors? Mark the box that best represents your actions. (Likert-type scale with 1 being Never and 5 being Very Often)

1. I would give directions to someone I did not know.
2. I would make change for someone I did not know.
3. I would give money to a charity.
4. I would donate clothes or goods to a charity.
5. I would help carry belongings of someone I did not know.
6. I would delay an elevator and hold the door for someone I did not know.
7. I would allow someone I did not know to go in front of me in line.
8. I would point out a clerk's error in undercharging me for an item.
9. I would let a neighbor I did not know well borrow an item of value to me.
10. I would help a classmate who I did not know well with a homework assignment when my knowledge was greater than his or hers.
11. I would voluntarily look after a neighbor’s pet or children without being paid.
12. I would offer to help a handicapped or elderly person across the street.
13. I would offer my seat on a train or bus to someone who was standing.
14. I would help an acquaintance move houses.

Appendix G

Attitudes Toward Charitable Giving Scale (Furnham, 1995)

Likert-type scale where 1 is Strongly Disagree and 5 is Strongly Agree.

1. Far too much money is wasted in the administration of charities.

2. Each of us has B (Christian) duty to help other through charities giving.

3. Too many charities do not distinguish between deserving and undeserving.

4. Helping people to help themselves is the ultimate aim of most charities.

5. Charity is an intelligent way of distributing money.

6. Giving to charity is a personal form of thanks-giving.

7. There should be no need for charity: the state should pay for the needy through money collected in taxes.

8. Most people give to charity out of pure sympathy with the recipient.

9. The trouble with charity is that it leads to dependency.

10. Unlike taxation, through charitable giving people can target or control exactly where their money is going.

11. There seems to be a lot of corruption in charity collection and distribution.

12. People who give to charity, and work for, charity are genuinely altruistic.

13. Many individuals (and large organization) who donate sums of money to charity have ulterior motives.

14. Charitable giving is the most efficient way of getting help to needy.

15. For many charity donation is simply a tax dodge.

16. Charities have to exist to assist causes not covered by the state.

17. Charities rely too much on sentimentality and not enough on realities.

18. People give more money to causes they identify with.

19. Many people try to solve their conscience by small gifts to charity.

20. Too many organizations hide behind the mask (and tax advantages) of being a charity.

Appendix H

Toronto Empathy Questionnaire (Spreng et al., 2009)

Likert-type scale where 0 is Never and 4 is Always.

1. When someone else is feeling excited, I tend to get excited too.

2. Other people's misfortunes do not disturb me a great deal.

3. It upsets me to see someone being treated disrespectfully.

4. I remain unaffected when someone close to me is happy.

5. I enjoy making other people feel better.

6. I have tender, concerned feelings for people less fortunate than me.

7. When a friend starts to talk about his/her problems, I try to steer the conversation towards something else.

8. I can tell when others are sad even when they do not say anything.

9. I find that I am "in tune" with other people's moods.

10. I do not feel sympathy for people who cause their own serious illnesses.

11. I become irritated when someone cries.

12. I am not really interested in how other people feel.

13. I get a strong urge to help when I see someone who is upset.

14. When I see someone being treated unfairly, I do not feel very much pity for them.

15. I find it silly for people to cry out of happiness.

16. When I see someone being taken advantage of, I feel kind of protective towards him/her.

Appendix I

IES (Gill & Mather, 2008)

Likert-type scale where 1 is Strongly Disagree and 6 is Strongly Agree.

1. Most people will live a healthy and active life.

2. Few people are capable of true compassion.

3. When I meet people, I usually expect that they will be friendly.

4. People are often insensitive to the needs of others.

5. People will usually treat others with respect.

6. People will generally help others in need.

7. People typically have good intentions toward others.

8. Most people will do whatever they can do to avoid hard work.

9. If people can mess things up, they generally will.

10. Most people will cheat to get ahead.

11. People can be trusted

12. Most people live by the “golden rule” (treat others as you would like to be treated).

13. Most people will live the lifestyle they have always wanted.

14. People will often tell lies if they can get away with it.

15. People cannot be relied on to keep their promises.

16. Most people will strive to be fair.

17. Most people will blame others for things that go wrong.

18. People have trouble being faithful to others.

19. People are generally capable of achieving their goals.

20. I expect most people I meet to be bright, intelligent, individuals.

21. Most people will take advantage of others if they get the chance.

22. Most people will deliberately say or do things to hurt you.

23. Most people do not really care what happens to others.

24. Most people are likely to succeed in reaching their goals.

Appendix J

MANIB (Gill & Mather, 2008)

Likert-type scale where -3 is Strongly Disagree and 3 is Strongly Agree.

1. I always try to give other people the benefit of the doubt when they've messed up.

2. Avoiding negativity toward other people is important to me.

3. I always try to seek out the good in other people.

4. I try not to be too critical of others.

5. When possible, I try to give people a second chance.

6. When I don't like a person initially, I try hard to keep an open mind about them.

7. I try hard not to treat people based on my stereotypes about them.

8. I am highly motivated to treat people fairly, no matter what I may think of them.

9. I try not to assume the worst about another person without finding out more about them.

10. Being positive in my judgments of others is important to me.

11. Treating people with kindness and respect is important to me.

12. I attempt to act in nonjudgmental ways toward other people because it is personally important to me.

Appendix K

NTB (Leary, Kelly, Cottrell, & Schreindorfer, 2005)

Likert-type scale where 1 is Strongly Disagree and 5 is Strongly Agree.

1. If other people don't seem to accept me, I don't let it bother me.

2. I try hard not to do things that will make other people avoid or reject me.

3. I seldom worry about whether other people care about me.

4. I need to feel that there are people I can turn to in times of need.

5. I want other people to accept me.

6. I do not like being alone.

7. Being apart from my friends for long periods of time does not bother me.

8. I have a strong need to belong.

9. It bothers me a great deal when I am not included in other people's plans.

10. My feelings are easily hurt when I feel that others do not accept me.

Appendix L

Short Dark Triad (Paulhus & Jones, 2011)

Likert-type scale where 1 is Strongly Disagree and 5 is Strongly Agree.

1. It's not wise to tell your secrets.

2. Generally speaking, people won't work hard unless they have to.

3. Whatever it takes, you must get the important people on your side.

4. Avoid direct conflict with others because they may be useful in the future.

5. It's wise to keep track of information that you can use against people later.

6. You should wait for the right time to get back at people.

7. There are things you should hide from other people because they don't need to know.

8. Make sure your plans benefit you, not others.

9. Most people are suckers.

10. Most people deserve respect. (R)

11. People see me as a natural leader.

12. I hate being the center of attention. (R)

13. Many group activities tend to be dull without me.

14. I know that I am special because everyone keeps telling me so.

15. I like to get acquainted with important people.

16. I feel embarrassed if someone compliments me.(R)

17. I have been compared to famous people.

18. I am an average person.(R)

19. I insist on getting the respect I deserve.

20. I like to get revenge on authorities.

21. I avoid dangerous situations. (R)

22. Payback needs to be quick and nasty.

23. People often say I’m out of control.

24. It’s true that I can be cruel.

25. People who mess with me always regret it.

26. I have never gotten into trouble with the law. (R)

27. I like to pick on losers.

28. I’ll say anything to get what I want.

Appendix M

I/E-Revised (Gorsuch & McPherson, 1989)

Likert-type scale where 1 is Strongly Disagree and 5 is Strongly Agree.

1. I enjoy reading about my religion.

2. I go to church because it helps me to make friends.

3. It doesn't matter much what I believe so long as I am good.

4. It is important to me to spend time in private thought and prayer.

5. I have often had a strong sense of God's presence.

6. I pray mainly to gain relief and protection.

7. I try hard to live all my life according to my religious beliefs.

8. What religion offers me most is comfort in times of trouble and sorrow.

9. Prayer is for peace and happiness.

10. Although I am religious, I don't let it affect my daily life.

11. I go to church mostly to spend time with my friends.

12. My whole approach to life is based on my religion.

13. I go to church mainly because I enjoy seeing people I know there.

14. Although I believe in my religion, many other things are more important in life.

Appendix N

Charity Attitude Scales

For each of the 10 charities in Table 2, participants answered the following questions on a Likert-type scale where 1 is dislike very much/not at all certain/not at all likely and 9 is like very much/extremely certain/extremely likely.

To what extent do you like or dislike this charity?

How certain are you of your opinion toward this charity?

How likely would you be to donate to this charity?

Appendix O

History of Charitable Giving

In the last month, approximately how much money, in dollars, have you donated to a charity or charities?

In the last month, approximately how much time, in hours, have you donated to a charity or charities?