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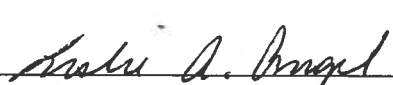
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ALTRUISM AND LOCUS OF CONTROL

Examination of the Correlation Between Altruism and Locus of Control

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Abstract

This study measured the correlation of altruism and locus of control in undergraduate college students. Previous research suggests that altruism and locus of control may be linked (Berkowitz 1967; Schopler & Matthews 1965). More specific research suggests that altruism and internal locus of control may be linked with a positive correlation (Gore & Rotter, 1963). The objective of this study was to retest the conclusions of that research as well as examine other possible correlations such as sex, grade level, and whether or not the student is traditional. One hundred forty five Carroll College students mostly enrolled in introductory psychology courses filled out the questionnaires, after which some participants were eliminated. Results did not find a correlation between self-reported altruism and locus of control. The unexpected results could be due to the design of the study, likely the complexity of locus of control beliefs, but less likely to male to female ratio, inexperienced/ young population, participant memory, et cetera. However, a significant correlation was found between altruism and academic standing (traditional and non-traditional students). This suggests that altruism increases with age, which were similar to other altruism and locus of control studies (Celfand & Hartmann, 1980; Staub, 1979; Underwood & Moore, 1982; Wright, 1942).

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Examination of the Correlation between Altruism and Locus of Control

Bryan and London define altruism as “those behaviors intended to benefit another but which appear to have a high cost to the actor with very little possibility of material or social reward” (Bryan & London, 1970). Altruism is helping others for the sake of helping them and not expecting anything in return. Why do people help others whom they know cannot repay them? Why do people give to others and expect nothing in return?

The scientific community has long been intrigued by the idea of altruism. Altruism troubled Darwin’s theory of natural selection, discussed in *The Descent of Man and Selection in Relation to Sex* (Darwin, 1871). Altruism did not fit the theory of natural selection originally, but by helping others, an organism is actually increasing the likelihood that its genes will be passed on, which is the basic selfish gene concept (Dawkins, 1976). It is now known that related individuals share common DNA. Altruistic behaviors towards one’s kin increase the likelihood that those family members will survive and reproduce (Dawkins, 1976). Therefore, altruistic behavior towards kin increases the likelihood that genes will be passed down to future generations through family members that share common DNA. These are the basics of kin selection theory (Hamilton, 1964).

Kin selection theory and the selfish gene explain how altruism between relatives is consistent with the theory of natural selection. In relation to kin selection theory is reciprocal altruism. The theory of reciprocal altruism suggests that altruism is a way to inspire helping so that help could be returned at a later time (Trivers, 1971). Reciprocal altruism is essential for the survival of social

creatures, such as humans. It is believed that altruism may be an innate quality and has been shown in children 20 months and older, who demonstrate altruistic behaviors through helping behavior (Warneken & Tomasello, 2009).

Many studies have been performed to examine altruistic behavior in children, but less research has been done on the altruistic tendencies of high school and college students. It has been suggested by various developmental researchers that altruism increases with age (Celfand & Hartmann, 1980; Staub, 1979; Underwood & Moore, 1982; Wright, 1942). However, it is possible that confounds may exist in this research. Students may simply have become more sensitive to demand characteristics with age and, therefore, participation bias may have increased as the children became older, making altruism appear to increase with age (Hoffman, 1975; Kurdek & Rodgon, 1975, Zarbatany, Hartman, & Gelfand 1985). Older elementary, junior high, high school, and college students are more likely to follow social norms set by cultural standards for altruistic behavior than younger students (Peterson, 1980; Peterson, Hartmann, & Gelfand, 1977).

It was found that altruistic personalities are more common in college students who exhibit an internal locus of control (Gore & Rotter, 1963). Locus of control is an individual's perspective on how much control he or she has over his or her own life, as Julian B. Rotter proposed the idea of a locus of control in the 1960's. People have either greater internal orientation, believing they have control over their own life, or greater external orientation, believing their lives are a matter of luck and happenstance (Rotter, 1966). People who help others have been found to be more likely to have an internal locus of control (Midlarsky, 1968). Other

research suggests that internally oriented fourth grade children were found more likely to share toys after a success than externally oriented peers (Staub, 1968). These studies suggest that altruism and locus of control may be correlated. To understand the possible correlation, locus of control needs to be understood.

A considerable amount of research has been done on locus of control, much of it on children. Researchers found that internally oriented children score higher on tests designed to measure motivation to succeed than externally oriented children (Nowicki & Strickland, 1973). As a result of their higher motivation, individuals who are more internally oriented tend to reach a higher job level than those who are more externally oriented (Nowicki & Strickland, 1973). Also, more internally oriented high school seniors and college students have a higher grade point average than more externally oriented individuals even though locus of control has not been demonstrated to correlate with intelligence (Nowicki 1971; Nowicki & Roundtree, 1971).

Past research on locus of control in adults has produced inconsistent results. Studies have found that internal locus of control decreased from college age into older adulthood (Bradley & Webb, 1976; Brim, 1974; Lachman, 1983; Lao, 1974; Ryckman & Malikioski, 1975; Saltz & Magruder-Habib, 1982; Siegler & Gatz, 1985). Other studies showed that internal locus of control increased from college age into older adulthood (Gatz & Siegler, 1981; Lachman, 1985; Staats, 1974; Strickland & Shaffer, 1971; Wolk & Kurtz, 1975). Still, others found that locus of control remains consistent as people age (Andrisani, 1978; Bradley & Webb, 1976; Nehrke, Hulicka, & Morganti, 1980; Saltz & Magruder-Habib, 1982).

Berkowitz, (1967), and Schopler and Matthews, (1965), found that altruism and locus of control might be linked. Individuals with an internal locus of control realize that they can positively impact others' lives by helping them. An internally oriented person is more likely to help someone needing legitimate assistance than they are to help someone seeking illegitimate help. An internally oriented person wants to make a positive impact, and by assisting someone who does not legitimately need help, he or she is not actually helping that individual, but hindering him (Berkowitz 1967; Matthews & Schopler, 1965).

The current study examined the possible correlation between altruism and locus of control. Data were collected and analyzed to assess correlations between altruism, locus of control, and demographic variables. The demographic variables included sex, year in school, and whether the student was traditional or non-traditional. This study used self-reported questionnaires to assess undergraduate college students' self perceptions of altruistic and locus of control tendencies. It was hypothesized that a significant positive correlation would be demonstrated between altruism and internal locus of control.

Methods

Participants

The participants were 168 (male= 36, female=109) college students. All students attended Carroll College, a small private liberal arts college located in Helena, Montana with a student population of approximately 1,450 students. Participants represented a variety of majors but the majority enrolled were psychology majors. Most of the participants came from an Introductory psychology

course and other samples were taken in mid- and upper-level psychology courses that consisted of mostly juniors, seniors, and fifth year students. Of the original 168, 22 were removed from the study due to an incomplete questionnaire, answering a question with multiple responses, or a partial response. After removing these individuals 145 students remained (134 traditional and 11 non-traditional), 62 were freshman, 36 sophomores, 20 juniors, and 27 seniors. Between academic year and sex, females were skewed towards the freshman with 54 participants, while there were 23 sophomores, 14 juniors, and 18 seniors. Males remained fairly consistent at 8 freshmen, 13 sophomores, 6 juniors, and 9 seniors (see Table 3).

Materials

The measures used were adopted from previous studies. The first questionnaire used was a self-report altruism scale to measure altruism (Rushton, 1981). The Health Locus of Control (Wallston, Kaplan, & Maides, 1976) (internal/external 1) scale measured self-reported health locus of control, which measures how much control people think they have over their health. The second self reported locus of control scale is a subset of Rotter's original locus of control scale (internal/ external 2) and measured overall locus of control (Rotter, 1966) (see appendix A).

Procedures

Data were collected at the commencement of every psychology class that that elected to participate. The study began when the researcher distributed questionnaire packets to the students in their desks while giving a briefing on the study. They were told the study was IRB (Institutional Review Board) approved and

therefore, students' names could not be traced to the information they completed. Students who participated were told to complete and sign the permission form and complete the questionnaires. They were informed that if they wished not to participate, or at any time wanted to discontinue participation, they could do so without any repercussions. If they did not sign the permission form or discontinued participation during the study, they were asked to wait quietly until the class completed the questionnaire. Participants completed the questionnaires at their desks in about ten minutes. When finished the students were asked to separate the permission form from the questionnaire and then bring the materials to the front of the classroom and turn them in to the researcher. After all of the participants handed back their questionnaires, the experimenter debriefed the participants about what the study was measuring and what the goal of the study was. Then the experimenter answered any questions the participants produced and class continued on as usual.

Results

Pearson's r correlations were calculated for both internal and external locus of control questionnaires and the altruism questionnaire. However, no significance was found with the correlation between internal/ external 1 or internal/ external 2 and altruism. A Spearman's rank order coefficient was conducted for year in school with all other variables and found no significance. Partial correlations were conducted to detect any effects of co-variation but no significant differences were demonstrated. Point biserial correlations were run for sex, and found no

significance. Another point biserial was conducted on traditionality and altruism did demonstrate a significant correlation ($p=.007$).

Discussion

The results of this study failed to support the hypothesis that a positive correlation exists between internal locus of control and altruism. There was no significant correlation between self-reported altruism and internal locus of control as measured by the self-reported internal/ external 1 or self-reported internal/external 2 questionnaires. General information questions were created to assess and categorize participants by sex, grade level, and whether the student was a traditional or non-traditional student (academic standing). These categories were then correlated with each other and with the locus of control and altruism questionnaire results to measure additional correlations. A point biserial correlation did demonstrate a significant correlation between academic standing (i.e. traditional or non-traditional) and altruism ($p=.007$). However, due to the dichotomous nature of the 'academic standing' variable, as well as the hugely disproportionate numbers in traditional and non-traditional groups, interpretation of this relationship is problematic.

A possible reason for failing to support the hypotheses could be due to the design of the study. The study was designed to measure locus of control in two separate ways. First, the health locus of control (internal/ external 1), was designed to measure a specific aspect of locus of control. That aspect was whether or not the participant thought they had control over their own health. If participants believe they control their health then they conceivably have an internal locus of control

overall. Secondly, Rotter's scale (internal/ external 2), was a general locus of control scale and measured the person's internal locus of control. These two inventories were meant to double-check one another to mutually support the measurement. No significance was attained between altruism and locus of control in the study, which may be due to the use of multiple questionnaires that double-check one another. The double-check were two separate, unrelated locus of control questionnaires, the health locus of control scale (internal/ external 2) and Rotter's subset (internal/ external 2). It was hoped by using both that they would supply more reliability to the study, but by using both it may have interfered with the study, causing unreliable results. Internal/external 1 was eleven questions while the internal/external 2 was a subset that was ten questions in length. Internal/external 2 may have caused issues with the study, by decreasing the reliability, which will be explained later.

Another possibility is that specific data did not correlate because the internal/external 1 questionnaire was originally a locus of control health questionnaire, not a questionnaire designed to determine whether an individual is more internally or more externally oriented as a whole. The locus of control health questionnaire (internal/external 1) was administered in addition to the Rotter's locus of control questionnaire (internal/external 2) to assess reliability of self-reported loci of control.

Both of the locus of control questionnaires were set up as dichotomous scales. A question answered positively for internal locus of control was answered negatively for external locus of control. Therefore, the magnitude of the correlations

between internal locus of control and the external locus of control were the same, but the correlations were opposite in direction (see Table 1). A participant whose answers were more internally oriented were always less externally oriented. Unsurprisingly, the correlations between the internal and external scales were all significant.

Two locus of control questionnaires were used in this study for several reasons. The first was to divide locus of control into two separate categories. Categories included a general locus of control questionnaire that is a subset of Rotter's original locus of control questionnaire; the second was a health locus of control to measure a specific aspect of locus of control. Both questionnaires were used together because they asked almost the same number of questions as the altruistic section, therefore balancing the whole questionnaire. A balanced questionnaire was intended to help prevent an overabundance of altruistic or locus of control questions and making the two scales more interpretable.

The health locus of control questionnaire (internal/external 1) was designed to test how much control the participants thought they had over their own health. If participants believe they have control over their own health, then they are more likely internally oriented (Wallston, Kaplan, & Maides, 1976). This questionnaire was chosen because it applies to everyone in that no one is immune to disease. It is an excellent way to measure locus of control because viruses and bacteria infect all people. However, measures can be taken to protect people, decreasing their likelihood of becoming sick. Although, a potential problem with the health locus of control questionnaire could be that beliefs related to locus of control and health are

highly complex, making accurate results difficult to obtain (Wallston, Kaplan, & Maides, 1976). Locus of control is but one of many different factors in how people handle disease. Some of those other factors may interfere with locus of control.

Rotter's locus of control scale (internal/external 2) was chosen to provide an overall picture of the participants' locus of control. The original locus of control questionnaire was long, and due to concern that participants would become fatigued, only a subset of the original was used. Another possible weakness of this study was that it used a short subset of the original questionnaire. The short subset prevented participant fatigue but possibly reduced reliability. Also, the original questionnaire was designed so that internal and external options were placed in the same ordinal location on the questionnaire. In hindsight, the order of the options should have been changed to a random order. A random order could have prevented response sets, which could have provided more reliable results.

It was found that academic standing correlated with altruism. Older non-traditional students rated themselves as more altruistic than younger traditional students. The results are similar to the results obtained by previous studies done on altruism and increasing age (Celfand & Hartmann, 1980; Staub, 1979; Underwood & Moore, 1982; Wright, 1942). One reason for this finding is that older students are more likely to have children, and parents use to doing altruistic deeds. Also, non-traditional students tend to have more experience related to non-school skills. This data may be inadequate due to small sample size. A possible inadequacy of this study was the small sample size of non-traditional students. There were 11 non-traditional participants compared to 134 traditional students. This leaves a high

probability that error exists in the correlation between academic standing and altruism and external 2. One thing that should be noted about non-traditional students and traditional students is the possible age difference. Non-traditional students are usually older than traditional students, even by just a few years. This age difference may have affected how the participants answered the questions. Questions asked were mostly experience related such as asking about moving neighbors in or out, and sending greetings cards. The questions were related to life experience. Older participants have more life experience and therefore had more opportunities to be altruistic. Altruistic opportunities on average have the same probability of being given to anyone at any particular time; therefore, older participants are more likely to have been asked to do an altruistic act compared to someone who is younger because they have more opportunities. An older individual is far more likely to have done an altruistic act than a younger individual.

Another aspect of this study was the disproportionate number of male and females that participated. Only 36 males participated, compared to 109 females. Carroll College has a 5 to 4 female to male ratio and the study had about 3 to 1 female to male ratio. This sample was not a representative sample of Carroll College's population, and females have been shown to be different in their altruistic actions in comparison to males (Andreoni & Vesterlund, 2001). Females tend to be more empathetic and caring as a whole, and one study found that women are more altruistic when it is more costly to the individual and men when it is less costly (Andreoni & Vesterlund, 2001). These ratios could possibly have skewed the data in unpredictable ways.

The self-report altruism scale consisted of 20 Likert scale questions with choices from 1 (never preformed the altruistic act) to 5 (very often preformed). This scale has been shown to be reliable and internally consistent (Rushton, Chrisjohn, & Frekken, 1981). However, it should be noted that some errors might have occurred. Some participants indicated that they “never were asked” to perform some of the altruistic deeds, such as helping a neighbor or stranger move out of or into a house. In other words, not all participants had the same opportunities to be altruistic. This lack of control could have affected the results of the study. The lack of control could be somewhat changed by conducting a study in which everyone was given the same opportunities, although this also may introduce problems (Krebs, 1970). Hypothetically, the study would place participants in situations that could elicit altruistic behavior, such as someone dropping money on the floor, then measuring their response. However, it has been shown that correlational studies of this nature are unreliable, and that the unreliability appears to be due to situational and participant variables (Krebs, 1970). These variables include things such as room, time of day, mood, personality, and background. Such variables make it difficult to obtain an accurate reading on altruism. Due to the unreliability of such studies, studies involving questionnaires to test hypothesizes, such as this one, are more realistic and broadly applicable.

The altruism questionnaire used in this study may have asked some questions about unique acts of altruism, such as helping to push a stranger’s car. Unique acts of altruism do not depend as much on altruistic personality traits, but on how atypical of a situation is presented (Krebs, 1970). However, the majority of

the questions asked about typically occurring events. Some of these events include buying cards for people, giving money to charity, giving someone a ride in a car, and letting neighbors borrow items. The few unusual questions may have given the study its inconclusive results, although it is unknown presently.

Another possible limitation of this study was the population tested in the experiment. Participants were not random; they were all college students. This is a limitation because factors may exist that set college students apart from non-college students. One possible factor is that college students may have a greater internal locus of control, while their peers who decided on working after high school may have more of an external locus of control. An internal locus of control helps people believe they have control over how well they do in school, therefore, they may study more, helping them obtain a higher grade point average (Nowicki 1971; Nowicki & Roundtree, 1971). Furthermore, the population in this study was not geographically diverse, coming mostly from Northwestern states. Students sampled were all enrolled in psychology classes, the majority of which were enrolled in General Psychology. A course made up of mostly freshmen and sophomores of various majors fulfilling liberal arts core credits. Results could be affected by the non-random sample. Is it possible that psychology majors could have similar traits that influenced them choosing psychology as a major, thus affecting the results.

There are practical applications to investigating the relationship between locus of control and altruism. Altruistic people tend to be higher achieving employees than less altruistic people and altruistic workers are more likely to do above and beyond what is required of them. If a correlation exists between an

internal locus of control and altruism, then employers should look to hire internally oriented individuals who have been shown to reach higher levels in the job field, therefore, becoming more successful (Nowicki & Strickland, 1973). Employers may want to use personality inventories to help find and hire more internally oriented individuals. Internally oriented individuals may work harder, which probably creates more production per person. Another implication of this study is that it adds to the ever-growing amount of information about personality. Personality inventories help to match personalities that can create working relationships between people who generally work well together. This is especially important in matching the personalities of employees to the personalities of bosses. Matching personalities increases the likelihood that the boss will like the worker. A worker who believes his boss likes him is more likely to work at a faster rate than one who believes his boss does not like him (Daniels & Berkowitz 1963).

Another implication deals with the significant result of altruism and academic standing. This result demonstrates that older individuals are probably more altruistic. One implication of this is that people who are older than traditional college students will be more altruistic towards individuals than college students. This inference may help non-profit organizations and corporations to focus more on people who are older than traditional college students for help.

As always, further research should be done to investigate the correlation between altruism and locus of control. More research is needed due to inconsistent results obtained from this and past research studies. These results are inconsistent due to the difficulty of isolating locus of control and altruism from other variables.

Furthermore, studies should be done on the correlation between altruism and academic standing to confirm or disconfirm this studies' results. Those results were that older students were more altruistic. Further research would give more detailed information about the correlation. Also, a study of that nature should focus to see if aging directly affects altruism. Continued research would provide more definite results bettering the understanding of how locus of control and altruism possibly interact with one another.

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Table 1

Correlational data run on all variables, please note that highlighted text shows significant results.

		Correlations					
		Sex	Year	Standing	Altruism	Internal	External
Sex	Pearson Correlation	1	.182*	.030	-.019	.061	-.059
	Sig. (2-tailed)		.028	.716	.825	.467	.482
	N	145	145	145	145	145	145
Year	Pearson Correlation	.182*	1	-.123	.069	-.006	.004
	Sig. (2-tailed)	.028		.140	.409	.944	.966
	N	145	145	145	145	145	145
Standing	Pearson Correlation	.030	-.123	1	-.223**	-.010	.009
	Sig. (2-tailed)	.716	.140		.007	.902	.910
	N	145	145	145	145	145	145
Altruism	Pearson Correlation	-.019	.069	-.223**	1	.009	-.006
	Sig. (2-tailed)	.825	.409	.007		.912	.946
	N	145	145	145	145	145	145
Internal	Pearson Correlation	.061	-.006	-.010	.009	1	-.999**
	Sig. (2-tailed)	.467	.944	.902	.912		.000
	N	145	145	145	145	145	145
External	Pearson Correlation	-.059	.004	.009	-.006	-.999**	1
	Sig. (2-tailed)	.482	.966	.910	.946	.000	
	N	145	145	145	145	145	145
Internal 1	Pearson Correlation	.096	.086	.073	-.083	.794**	-.795**
	Sig. (2-tailed)	.249	.304	.381	.319	.000	.000
	N	145	145	145	145	145	145
External 1	Pearson Correlation	-.096	-.086	-.073	.083	-.794**	.795**
	Sig. (2-tailed)	.249	.304	.381	.319	.000	.000
	N	145	145	145	145	145	145
Internal 2	Pearson Correlation	-.024	-.120	-.111	.123	.622**	-.620**
	Sig. (2-tailed)	.774	.149	.182	.142	.000	.000
	N	145	145	145	145	145	145
External 2	Pearson Correlation	.024	.120	.111	-.123	-.622**	.620**
	Sig. (2-tailed)	.774	.149	.182	.142	.000	.000
	N	145	145	145	145	145	145

Individual Questionnaire Correlations

		Internal 1	External 1	Internal 2	External 2
Sex	Pearson Correlation	.096	-.096*	-.024	.024
	Sig. (2-tailed)	.249	.249	.774	.774
	N	145	145	145	145
Year	Pearson Correlation	.086*	-.086	-.120	.120
	Sig. (2-tailed)	.304	.304	.149	.149
	N	145	145	145	145
Standing	Pearson Correlation	.073	-.073	-.111	.111**
	Sig. (2-tailed)	.381	.381	.182	.182
	N	145	145	145	145
Altruism	Pearson Correlation	-.083	.083	.123**	-.123
	Sig. (2-tailed)	.319	.319	.142	.142
	N	145	145	145	145
Internal	Pearson Correlation	.794	-.794	.622	-.622
	Sig. (2-tailed)	.000	.000	.000	.000
	N	145	145	145	145
External	Pearson Correlation	-.795	.795	-.620	.620
	Sig. (2-tailed)	.000	.000	.000	.000
	N	145	145	145	145
Internal 1	Pearson Correlation	1	-1.000	.018	-.018
	Sig. (2-tailed)		.000	.829	.829
	N	145	145	145	145
External 1	Pearson Correlation	-1.000	1	-.018	.018
	Sig. (2-tailed)	.000		.829	.829
	N	145	145	145	145
Internal 2	Pearson Correlation	.018	-.018	1	-1.000
	Sig. (2-tailed)	.829	.829		.000
	N	145	145	145	145
External 2	Pearson Correlation	-.018	.018	-1.000	1
	Sig. (2-tailed)	.829	.829	.000	
	N	145	145	145	145

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

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

Table 2

Mean and standard deviation of students responses.

		Report						
		Altruism	Internal	External	Internal 1	External 1	Internal 2	External 2
Mean		53.81	15.11	5.88	6.80	4.20	8.31	1.69
Total	N	145	145	145	145	145	145	145
	Std. Deviation	9.769	2.378	2.391	1.862	1.862	1.446	1.446

Altruism score range: 20-100

Internal and external score range: 0-21

Internal 1/ External 1 score range: 0-11

Internal 2/ External 2 score range: 0-10

Table 3

Participant demographics, please note that nontraditional students were grouped with seniors in this table.

		Year					
		Female	Male	Frequency	Percent	Valid Percent	Cumulative Percent
	Freshman	54	8	62	42.8	42.8	42.8
	Sophomore	23	13	36	24.8	24.8	67.6
Valid	Junior	14	6	20	13.8	13.8	81.4
	Senior	18	9	27	18.6	18.6	100.0
	Total	109	36	145	100.0	100.0	

Appendix A

Carroll College

**Subject Consent Form
For Participation in Human Research**

Title of Study: Examination of the Correlation between Altruism and Locus of Control

You have been asked to participate in a research study. From this study, the investigator(s) hope to learn how altruism is affected by cognitive load and if it is correlated with how altruistic the participant believes they are.

You have been selected to participate in this study because you are the appropriate age and grade level. If you agree to participate, you will be asked answer 44 questions. The study is expected to involve 200 participants.

Participation in this study may involve certain risks, including the study is of no benefit to you.

Funding for this study will be provided by David Lewallen. The cost too you is your time.

Your privacy is important to us. Confidentiality of records identifying you will be maintained by a locked cabinet.

Carroll College cannot be held responsible for injury, accidents, or expenses that may occur as a result of your participation in this project. In addition, Carroll College cannot be held responsible for injury, accidents, or expenses that may occur as a result of traveling to and from your appointments at the site of data collection.

Further information about this research study may be obtained by calling **David Lewallen** at **406-698 4659**. Additional questions about the rights of human subjects can be answered by the Chairman of the Institutional Review Board, Dr. Jamie Dolan (406) 447-4969 or jdolan@carroll.edu.

I agree to the participation of _____ (*name*) in this research. The investigator has thoroughly explained the nature and process of this research to me. I have read the above and understand the discomforts, inconveniences and risks of this study. I understand that the subject or I may later refuse participation in this research and that the subject, through his/her own action or mine, may withdraw from the research at any time without penalty or loss of benefits to which the subject is otherwise entitled. To the best of my knowledge the subject has no physical or mental condition that would be adversely affected by his/her participation. I have received a copy of this consent form for my own records. By signing this document you are allowing the researcher to use the information in the packet

Signature of Participant

Date

Printed Name of Participant

Signature of Witness

Date

Printed Name of Witness

Appendix B

General Information Questions

Are you a FEMALE or MALE?

What is your grade level?

Freshman Sophomore Junior Senior Super Senior

What type of student are you?

Traditional Non-traditional

Answer the following questions.

1=Never 2=Once 3=More than once 4=Often 5= Very Often

- | | | | | | |
|---|---|---|---|---|---|
| 1. I have helped push a stranger's car. | 1 | 2 | 3 | 4 | 5 |
| 2. I have given directions to a stranger. | 1 | 2 | 3 | 4 | 5 |
| 3. I have made change for a stranger. | 1 | 2 | 3 | 4 | 5 |
| 4. I have given money to a charity. | 1 | 2 | 3 | 4 | 5 |
| 5. I have given money to a stranger who needed it (or asked me for it). | 1 | 2 | 3 | 4 | 5 |
| 6. I have donated goods or clothes to a charity. | 1 | 2 | 3 | 4 | 5 |
| 7. I have done volunteer work for a charity. | 1 | 2 | 3 | 4 | 5 |
| 8. I have donated blood. | 1 | 2 | 3 | 4 | 5 |
| 9. I have helped carry a stranger's belongings (books, parcels, etc.). | 1 | 2 | 3 | 4 | 5 |
| 10. I have delayed an elevator and held the door open for a stranger. | 1 | 2 | 3 | 4 | 5 |
| 11. I have allowed someone to go ahead of me in a lineup (at Xerox machine, in the supermarket). | 1 | 2 | 3 | 4 | 5 |
| 12. I have given a stranger a lift in my car. | 1 | 2 | 3 | 4 | 5 |
| 13. I have pointed out a clerk's error (in a bank, at the supermarket) in undercharging me for an item. | 1 | 2 | 3 | 4 | 5 |
| 14. I have let a neighbor whom I didn't know too well borrow an item of some value to me (e.g., a dish, tools, etc.). | 1 | 2 | 3 | 4 | 5 |
| 15. I have bought Holiday Greeting cards deliberately because it was a good cause. | 1 | 2 | 3 | 4 | 5 |

16. I have helped a classmate who I did not know that well with a homework assignment when my knowledge was greater than his or hers.	1	2	3	4	5
17. I have before being asked, voluntarily looked after a neighbor's pets or children without being paid for it.	1	2	3	4	5
18. I have offered to help a handicapped or elderly stranger across a street.	1	2	3	4	5
19. I have offered my seat on a bus or train to a stranger who was standing.	1	2	3	4	5
20. I have helped an acquaintance to move households.	1	2	3	4	5

Answer the following the questions. If you agree circle **yes**, if you disagree circle **no**.

1. If I take care of myself, I can avoid illness.	Yes	No
2. Whenever I get sick it is because of something I've done or not done.	Yes	No
3. Good health is largely a matter of good fortune.	Yes	No
4. No matter what I do, if I am going to get sick I will get sick.	Yes	No
5. Most people do not realize the extent to which their illnesses are controlled by accidental happenings.	Yes	No
6. I can only do what my doctor tells me to do.	Yes	No
7. There are so many strange diseases around that you can never know how or when out might pick one up.	Yes	No
8. When I feel ill, I know it is because I have not been getting the proper exercise or eating right.	Yes	No
9. People who never get sick are just plain lucky.	Yes	No
10. People's ill health results from their own carelessness.	Yes	No
11. I am directly responsible for my health.	Yes	No

I more strongly believe that

___ Promotions and grades are earned through hard work and persistence

___ In my experience I have noticed that there is usually a direct connection between how hard I study and the grades I get.

___ The number of divorces indicates that more and more people are not trying to make their marriages work.

___ When I am right I can convince others.

___ In our society, a person's future earning power is dependent upon his or her ability.

___ If one knows how to deal with people, they are really quite easily led.

___ In my case, the grades I make are the result of my own efforts; luck has little or nothing to do with it.

___ People like me can change the course of world affairs if we make ourselves heard.

___ I am the master of my fate.

___ Getting along with people is a skill that must be practiced.

Or

___ Making a lot of money is largely a matter of getting the right breaks.

___ Many times the reactions of teachers seem haphazard to me.

___ Marriage is largely a gamble.

___ It is silly to think that one can really change another person's basic attitude.

___ Getting promoted is really a matter of being a little luckier than the next person.

___ I have little influence over the way other people behave.

___ Sometimes I feel that I have little to do with the grades I get.

___ It is only wishful thinking to believe that one can really influence what happens in society at large.

___ A great deal that happens to me is probably a matter of chance.

___ It is almost impossible to figure out how to please some people.

