# AN EXPLORATION OF THE RELATIONSHIP AMONG COMMUNITY NORMS, IDENTIFICATION WITH COMMUNITY, AND PROSOCIAL BEHAVIOR

A Thesis
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By

Courtney Lynn Rust

In Partial Fulfillment of the Requirements
for the Degree of
MASTER OF SCIENCE

Major Department:
Human Development and Family Science

October 2010

Fargo, North Dakota

# North Dakota State University
## Graduate School

**Title**

An Exploration of the Relationship Among Community Norms,

Identification with Community, and Prosocial Behavior

**By**

Courtney Lynn Rust

The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota State University's regulations and meets the accepted standards for the degree of

**MASTER OF SCIENCE**

North Dakota State University Libraries Addendum

To protect the privacy of individuals associated with the document, signatures have been removed from the digital version of this document.

## ABSTRACT

Rust, Courtney Lynn, M.S., Department of Human Development and Family Science, College of Human Development and Education, North Dakota State University, October 2010. An Exploration of the Relationship Among Community Norms, Identification with Community, and Prosocial Behavior. Major Professor: Dr. Brandy A. Randall.

Proponents of social identity theory assert that individuals are motivated to behave in ways consistent with the norms of the social groups in which they belong. The goal of the study was to test the relationship between group norms, specifically residential groups and religious groups, and prosocial behavior. The linkages between participants' degree of identification with their current community, perceived encouragement of prosocial behavior by the community, and self-reports of prosocial behavior were examined. Based on previous research on social identity theory and the role of prosocial behavior norms in religious communities (Saraglou, Pichon, Trompette, Verschueren, & Dernelle, 2005; Youniss, McLellan, & Yates, 1999), it was hypothesized that participants who rated religion as more important would report higher levels of prosocial behavior than participants who rated religion as less important. It was also hypothesized that participants who identified strongly with their community and resided in a community that supported prosocial behavior would report higher levels of prosocial behavior than those who did not identify strongly with their community and/or those whose community did not support prosocial behavior. Women reported higher levels of prosocial behavior than did men. There was not a significant association between the importance of religion and individual prosocial behavior. At the bivariate level, there were significant positive correlations among the perception that the community encouraged prosocial behavior, identification with the community, and the individual's self-reported level of prosocial behavior. A

multiple regression analysis showed that only identification with the community significantly predicted prosocial behavior, and there was no interaction between community encouragement of prosocial behavior and identification with the community. Explanations for findings and directions for future research are discussed.

# TABLE OF CONTENTS

ABSTRACT......iii

LIST OF TABLES......vii

INTRODUCTION AND LITERATURE REVIEW......1

Social Identity Theory......2

Group Norms......5

Prosocial Behavior and Gender......8

Research Goals and Hypotheses......9

METHOD......11

Participants......11

Measures......12

Procedure......13

RESULTS......14

Gender and Prosocial Behavior......14

Correlations for the Total Sample......14

Regression Model Predicting Individual Prosocial Behavior......14

DISCUSSION......20

Residential Communities and Prosocial Behavior......20

Religious Communities and Prosocial Behavior......21

Toward a Socioecological Model of Prosocial Behavior......22

Methodological Issues......23

Conclusions and Future Directions......24

REFERENCES......26

APPENDIX A. IRB APPROVED PROTOCOL....................................................34

APPENDIX B. CONTINUATION OF IRB APPROVED PROTOCOL.....................35

APPENDIX C. IDENTIFICATION WITH COMMUNITY SCALE.........................38

APPENDIX D. COMMUNITY ENCOURAGEMENT OF PROSOCIAL BEHAVIOR SCALE..........................................................................................39

APPENDIX E. PROSOCIAL BEHAVIOR SCALE............................................40

APPENDIX F. LETTER OF INFORMED CONSENT........................................41

## LIST OF TABLES

Table Page

1. Means and Standard Deviations for Women and Men....15
2. Correlations Among All Variables for the Total Sample....16
3. Correlations Among All Variables Separately by Gender....17
4. Regression Predicting Individial Prosocial Behavior....19

# INTRODUCTION AND LITERATURE REVIEW

Prosocial behavior can be defined as "voluntary actions undertaken to benefit others" (Alessandri, Caprara, Eisenberg, & Steca, 2009, p. 1229). These actions may result in a personal cost or risk to the individual. Examples of prosocial behavior include sharing, donating, comforting, and helping. Scholars have studied a variety of influences on prosocial behavior. Prosocial behavior may be due to any of the following: increased capacity for moral judgment (Blasi, 1984; Kohlberg, 1969; Rest, 1984), empathic arousal (Hoffman, 2000) and the desire to alleviate emotional arousal (Hastings, Zahn-Waxler, & McShane, 2006), the desire to personally survive (Hastings et al., 2006) and for an individual's genes to be passed on (Rachlin, 2002), reasons of social desirability (Carlo, Eisenberg, Troyer, Switzer, & Speer, 1991), or because of differences in temperament (Eisenberg & Hand, 1979; Eisenberg, Pasternack, Cameron, & Tryon, 1984; Farver & Branstetter, 1994; Kochanska, DeVet, Goldman, Murray, Putnam, 1994; Stanhope, Bell, & Parker-Cohen, 1987). Prosocial behavior may also be the result of behaving in a way that the individual perceives is consistent with his or her social identity (Tajfel & Turner, 1985).

The goal of the current study was to examine prosocial behavior through the lens of social identity theory. Identity can be defined in multiple ways, but for the purposes of this study it was conceptualized as how the individual distinguishes himself or herself from others, in other words the unique characteristics that the individual attributes to himself or herself (Erikson, 1964). Through interactions with other individuals and with various social groups, such as the individual's neighborhood or religious community, the individual comes to an understanding of himself or herself as belonging to or holding similar values

as larger social groups. This is termed the individual's social identity (Tajfel & Turner, 1985).

**Social Identity Theory**

Social identity formation is a multi-step process where the individual first identifies with and then categorizes himself or herself in relation to other individuals and groups (Hogg & Abrams, 1988; McCall & Simmons, 1978; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). The individual first recognizes the salient qualities of different individuals or social groups. A social group may be defined as "a set of individuals who hold a common social identification or view themselves as members of the same social category," (Stets & Burke, 1996, p. 2-3). While sometimes the social group is explicitly chosen, for example joining a club or religion, in other situations the social group might be one the individual becomes a part of by default, for example by living in a particular town or neighborhood. The individual then questions whether he or she agrees with the characteristics of the group or if the characteristics are similar to ones the individual has already internalized. Group characteristics that may be examined in this process include group attitudes, group beliefs, group values, and group behavior norms.

After identification, the individual then decides to categorize himself or herself in relation to the group by internalizing, for example a statement such as "I believe in the values of this religious denomination and/or their values are similar to ones I currently hold. Because of this, I am now a member of this church." After categorization, individuals similar to the individual are defined as the in-group. Individuals who differ from the group in a marked way are defined as the out-group (Hogg & Abrams, 1988).

Researchers have found that the stronger the identification with the in-group, the more salient the group values and practices are to the individual (Tajfel & Turner, 1985).

The process of self-categorization expands the individual's personal identity. Inherent in the adoption of new identity categories are new expectations that influence behavior (Burke, 1991; Burke & Reitzes, 1981; Burke & Tully, 1977; Thoits, 1986). For example, an individual may classify himself or herself as a member of a specific religious group. Because groups have norms for the beliefs and behavior of their members, adoption of the group carries with it a set of meanings and behavioral expectations. The individual will be influenced to behave in ways consistent with this picture. Individuals may deviate from expectations; however, there are certain circumstances where adherence is more likely.

When identification is strong, individuals may be more likely to conform to the norms of the group (Turner & Oakes, 1986). This has been termed self-consistency (Blasi, 1984; Erickson, 1964; Rosenberg, 1979). When an individual is presented with a situation where the group norms dictate action, and the individual does not act, an inconsistency results between his or her inaction and social identity. This may result in distress for the individual, as he or she has behaved in a way that is contradictory to his or her social identity (Hastings et al., 2006). For example, if an individual is part of a religious group that holds expectations for helping those less fortunate, and he or she is asked to volunteer, the individual may be more likely to volunteer than an individual who does not identify with this group or its behavioral expectations for helping. If the individual does not act, he or she may feel distress related to the inconsistency between the group norm's expectation for action, and his or her lack of action. This distress may be greater when identification

with the group is strong (Turner & Oakes, 1986). When an individual has less control over his or her social group, he or she may then be less likely to recognize the group values, less likely to identify with the group, and therefore may feel less distress when behaving in a way that is inconsistent with these values (Tajfel & Turner, 1985; Turner & Oakes, 1986).

Scholars have theorized that there are subtypes of social identity that are specific to certain behaviors such as prosocial behavior. Blasi (1984) was the first to distinguish a type of social identity that he termed moral identity. While social identity carries with it expectations regarding general behavior both within and outside of the group (Ashforth & Mael, 1989), moral identity carries with it specific expectations regarding moral behavior (Aquino & Reed, 2002). Moral identity may be thought of as rules of conscience for how individuals should and should not act and how others should be treated (Rosenberg, 1979). Blasi (1984) argued that there exists a set of common traits that make up moral identity. These traits include caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, and kind (Aquino & Reed, 2002, p. 1426). The distinction between moral identity and social identity is important. It is likely that moral identity will have more of an impact on prosocial behavior than general social identity or other aspects of social identity.

Aquino and Reed (2002) have identified two components of social identity, internalization and symbolization. *Internalization* refers to the degree to which the individual feels a set of traits is central to his or her identity (p. 1427). *Symbolization* refers to the degree to which these traits are expressed publicly through the individual's social actions (p. 1427). Aquino and Reed also studied internalization and symbolization related to moral identity. When participants were asked to rate how well nine moral identity traits described them, it was found that both internalization and symbolization predicted self-

reported volunteerism. Using a second sample, they found that internalization predicted actual donation behavior. Reynolds and Ceranic (2007) also found that moral identity may influence behavior. In situations where social consensus was high that a particular action was prosocial, they found that moral identity influenced prosocial behavior. When social consensus was low, they found that moral identity and moral judgment interacted to influence prosocial behavior. Social consensus can also influence the behavior of the individual, particularly when the individual evaluates the group positively (Tajfel & Turner, 1985).

**Group Norms**

Ajzen (1991) argues in his Theory of Planned Behavior (TPB) that behavior is a reasoned process that is influenced by intention, or the degree to which individuals are willing to work to engage in the behavior. Intention is influenced by several factors including subjective norms and self-identity (Ajzen, 1991; Conner & Armitage, 1998). Subjective norms are defined as "the amount of pressure that people perceive they are under from significant others to perform a specific behavior" (Smith & Louis, 2008, p. 648). This pressure may originate from individuals, social groups, or the larger social systems in which the individual is embedded.

Intentions to perform a behavior have been associated with social group norms for topics as diverse as binge drinking (Johnston & White, 2003); adolescent bullying toward out-group members when there was a norm of dislike for outsiders (Nesdale, Durkin, Maass, Kiesner, & Griffiths, 2008); self-injurious behavior (Sloan, Berman, Ziegler-Hill, Greer, & Mae, 2006); and discussion and use of safe sex practices (White, Terry, & Hogg, 1994). Intention and behavior were found to be more strongly correlated with social group

norms when the individual strongly identified with the reference group (Johnston & White, 2003; Schofield, Pattison, Hill, & Borland, 2001).

When the influence on behavior originates from a social group or larger social system, it is termed a social group norm. Feldman (1976) defines social group norms as "informal rules that groups adopt to regulate and regularize group members' behavior" (p. 47). Individuals may first blindly comply with the expectations of the group, possibly to gain approval and avoid rejection (Turner & Oakes, 1986). As the individual begins to identify with the group and take on the group norms, compliance turns to identification and internalization (Crandall, Eshleman, and O'Brien, 2002). This influence may be compounded when there is a clear distinction between the in-group and out-group. In situations such as these, the individual may feel more pressure to behave in line with group norms, as long as the individual evaluates the in-group positively (Tajfel & Turner, 1985). Individuals' responses have been shown to shift toward the group norm after interaction with the group, as has favoritism for the in-group compared to the out-group (Tajfel & Turner, 1985; Turner & Oakes, 1986).

A number of researchers have studied the links between social group norms and individual behavior. Associations have been found for the following: binge drinking (Johnston & White, 2003); self-injurious behavior (Sloan, Berman, Ziegler-Hill, Greer, & Mae, 2006); adolescent cigarette use (Schofield, Pattison, Hill, & Borland, 2001); binge eating (Crandall, 1988); and unequal distribution of rewards to in-group and out-group members when there was a group norm of discrimination (Jetten, Spears, & Manstead, 1996). Group norms have also been linked to various prosocial behaviors such as helping a bystander when there was a prosocial group norm of altruism (Horowitz, 1971), and giving

money to an opponent after group norms of altruism were highlighted for participants (Krupka & Weber, 2009). It is clear that these links have been observed in a wide array of situations.

**Religion, group norms, and prosocial behavior**. A religious group can be thought of as one type of social group with which individuals interact. Individuals have some degree of freedom in choosing their religions and may do so in part because of the perceptions of the group norms and values of the religious group. Proponents of social control theory argue that individuals who identify as religious adhere to ethical principles of religion restricting certain behaviors while promoting other behaviors, such as showing concern for and helping others (Sung Pyo Jun, 2005). Sung Pyo Jun looked specifically at those identifying as Protestants. Linkages between religious group norms, identity, and behavior have been made by several researchers (Saraglou, Pichon, Trompette, Verschueren, & Dernelle, 2005; Sung Pyo Jun, 2005; Youniss, McLellan, & Yates, 1999). In an experimental study, Saraglou et al. (2005) found that adult participants who identified as religious were more likely than non-religious participants to help a member of the family, a class or work colleague, or a friend in a hypothetical situation. A sibling and friend were also more likely to view the religious participant as someone who would engage in prosocial behavior. A similar finding was made by Sung Pyo Jun (2005) who observed that individuals who identified as religious reported stronger values regarding prosocial behavior and reported that they had volunteered more for community services than those who did not identify as religious. A similar pattern has been found for adolescents. Adolescents who rated religion as important were also more likely to report engaging in community service (Youniss, et. al, 1999). Thus, there appear to be linkages

between prosocial norms and behavior for religious groups, similar to that argued by proponents of social control theory.

**Community, group norms, and behavior.** Community is another type of social group. A community may be thought of as a group of people living and interacting in a common geographical area, such as a neighborhood community (McMillan & Chavis, 1986). Unlike religion, people may not choose communities based on the perceptions of values that the group holds. Individuals may choose their community for a variety of reasons including accessibility of employment, economics, and availability of public services (McFadden, 1977). Individuals may be unaware of the community values until residing in the community for a period of time. Researchers have found that behavior norms in communities such as taverns, farming neighborhoods and online groups tend to match the behavior of those who are active members (Bagozzi, Dholakia, & Pearo, 2007; Gottlieb, 1957; Marsh & Coleman, 1956). Because a community is one type of social group, the findings for social group norms and the corresponding behavior of its members would also apply in this situation. As previously discussed, once an individual becomes an active member of the community, meaning the individual has identified with the community, categorized himself or herself in relation to the community and internalized community norms, he or she may be more likely to behave in ways consistent with these norms (Turner & Oakes, 1986).

## Prosocial Behavior & Gender

Considering the ways in which women and men are socialized, it is reasonable to think that women would engage in higher levels of prosocial behavior than men. However, based on research by Eagly (2009), women and men engage in approximately equal

amounts of prosocial behavior. The type of prosocial behavior is different for each gender. Women engage in more communal or relational prosocial behavior, such as caring for others. Men, on the other hand, engage in more agentic prosocial behavior, such as demonstrations of mastery, dominance, or strength.

**Research Goals and Hypotheses**

The present study was designed to fill a gap in the current literature regarding potential links between membership in two types of social groups, religious groups and communities of residence, and prosocial behavior. Building on the previous work of researchers such as Saraglou et al. (2005) regarding perceived norms operating in religious groups that may influence the prosocial behavior of group members, the current study examined perceived norms operating in participants' religious groups and/or communities of residence that may have influenced prosocial behavior. The current study examined the links between group membership and prosocial behavior. Rather than a one-time experimental setting which was utilized in Saraglou's research, the current study examined more stable reports of participants' recollections of prosocial behavior over the past year.

The links between community norms and prosocial behavior were addressed through the following research questions. First, how are self-reported importance of religion and prosocial behavior related? This was tested using a partial correlation controlling for age and gender. Second, how are community belonging and prosocial behavior related? This was tested using a multiple regression analysis. The variables, *Identification with Community* and *Community Encouragement of Prosocial Behavior* were centered prior to creating an interaction term. Gender, all centered main effects, and the

interaction between the variables *Identification with Community* and *Community Encouragement of Prosocial Behavior* were entered into the regression model.

Based on previous research on social identity theory and the role of prosocial behavior norms operating in religious communities (Saraglou et al., 2005; Youniss et al., 1999), it was hypothesized that participants who identified as highly religious would report higher levels of prosocial behavior. It was also hypothesized that the relations between community belonging and prosocial behavior would be moderated by the perception that the community valued prosocial behavior. Specifically, it was expected that participants who identified strongly with their community of residence would report higher levels of prosocial behavior if they believed the community valued prosocial behavior. Further, it was expected that feelings of identification with the community and a belief that the community encouraged prosocial behavior would be associated with individual levels of prosocial behavior.

# METHOD

The data for this paper were drawn from a larger IRB-approved multigenerational study that explored the relationships, risk-taking behaviors, gambling attitudes and behaviors, prosocial behaviors, and community-related perceptions of undergraduate students and their closest parent and grandparent. Data collection involved the completion of student, parent, and grandparent self-report surveys. Because the goal of this thesis was to examine potential linkages between adult participants' communities and self-reported prosocial behavior, only select variables from the parent/grandparent data that were related to these constructs were analyzed.

## Participants

There were 204 participants who took part in the original study. One hundred sixty participants reported their race as white. The percentage of participants who reported their communities contained less than 500 to 4,999 people was 47.1 percent. The percentage of participants who reported their communities contained between 5,000 and 49,999 people was 28.4 percent. The percentage of participants who reported their communities contained between 50,000 and 99,999 people was 14.2 percent. The percentage of participants who reported their communities contained greater than 100,000 people was 10.3 percent.

To ensure independence of data, only data collected from one adult per family were included. In situations where more than one member of the same family was originally included, one parent or grandparent was randomly selected through a coin flip to be deleted from the data set. Participants in the analytic data set included 162 adults, ($N$ = 86%) ranging in age from 32 to 87 years old ($M$ = 54.87). One participant omitted information

regarding gender. All participants had a child or grandchild enrolled in an upper Midwestern university at the time of the study.

**Measures**

**Identification with community.** Using 12 items that were drawn from existing measures of community attachment and sense of community (Bishop, Chertok, & Jason, 1997; Buckner, 1988; Christakaopoulou, Dawson, & Gari, 2001; Stedman, 2003), participants were asked to report their level of identification with their current community (e.g., "My community reflects the type of person I am"). Participants responded along a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert-type scale with higher scores indicating stronger identification with community (One item was reverse coded). Participants needed to complete at least nine of the items to receive a scale score. Chronbach's alpha for this instrument is .89 in the current sample.

**Community encouragement of prosocial behavior.** Using eight items drawn from existing measures of sense of community (Bishop, Chertok, & Jason, 1997; Buckner, 1988), participants were asked to report the perceived level of encouragement their current community provides for prosocial behavior (e.g., "My community makes you feel good for helping") along a 1 (*strongly disagree*) to 5 (*strongly agree*) Likert-type scale with higher scores indicating stronger perceived community encouragement for prosocial behavior. Participants needed to complete at least six of the items to receive a scale score. One item was reverse-coded and the average of all items was taken. Chronbach's alpha for this instrument is .76 in the current sample.

**Prosocial behavior.** Using six items drawn from the *Primary Prevention Awareness, Attitudes, and Usage Scale* (PPAAUS; Swisher, Shute, & Bibeau, 1985),

participants were asked to report the degree of prosocial behavior they engaged in within the past year (e.g., "Raised or donated money for a charitable cause") along a 1 (*never*) to 6 (*almost every day or more*) Likert-type scale with higher scores indicating more frequent engagement in prosocial behavior. Participants needed to complete at least five of the items to receive a scale score and the average of all items was taken. Chronbach's alpha for this instrument is .79 in the current sample.

**Religious importance.** To assess for religious importance, participants were asked, "How important would you say your religion is to you?" Participants were asked to respond along a 1 (*not at all important*) to 5 (*very important*) Likert-type scale with higher scores indicating stronger feelings of personal religious importance.

## Procedure

During the summer and fall 2008 semesters, undergraduate students volunteered to participate in the original study in exchange for either course extra credit or ten dollars. The child or grandchild was recruited for the study through in-class and Internet announcements, posted signs on campus, and emails sent to students through the undergraduate listserv and to instructors in various departments. Participating students were asked to address an envelope to one parent and one grandparent with whom they spent the most time while growing up. Students chose a code word and labeled their family members' surveys with the code word. Project staff mailed these individuals a self-report survey. Also included was a stamped and addressed envelope to return completed surveys. All responses were anonymous, as the list of code words was not kept.

# RESULTS

## Gender and Prosocial Behavior

Mean scores for the total sample and separately by gender are shown in Table 1. Independent samples t-tests were conducted to test for gender differences. Women reported higher levels of prosocial behavior than did men. No other significant differences emerged. Mean levels of prosocial behavior were compared for women and men using an independent samples t-test. Results showed that women reported higher levels of prosocial behavior than did men, $t$ (156) = 3.60, $p < .001$.

## Correlations for the Total Sample

As shown in Table 2, there were significant positive pairwise correlations among the perception that the community supported prosocial behavior, identification with the community, and the individual's self-reported level of prosocial behavior. First, participants who strongly identified with their community had the perception that their community encouraged prosocial behavior. Those who believed that their community encouraged prosocial behavior reported more individual prosocial behavior. Finally, those who reported a stronger level of identification with their community reported engaging in more prosocial behavior over the past year. Self-reported importance of religion was significantly correlated with older age for women, but not for men, as shown in Table 3.

## Regression Model Predicting Individual Prosocial Behavior

A linear multiple regression analysis was conducted to examine whether identification with community and community encouragement of prosocial behavior predicted individual level of prosocial behavior. It was predicted that the association

Table 1. *Means and Standard Deviations for Women and Men*

| | Total Sample | | | Women | | | Men | | |
|---|---|---|---|---|---|---|---|---|---|
| Variable | M (sd) | Range | *N* | M (sd) | Range | *N* | M (sd) | Range | *N* |
| Community Encourages | | | | | | | | | |
| Prosocial Behavior | 3.65 (.44) | 3.21-4.09 | 160 | 3.67 (.43) | 3.24-4.10 | 137 | 3.56 (.43) | 3.13-3.99 | 22 |
| Identification with Community | 3.52 (.54) | 2.98-4.06 | 160 | 3.53 (.54) | 2.99-4.07 | 137 | 3.47 (.47) | 3.00-3.94 | 22 |
| Individual Prosocial Behavior | 4.03 (.71) | 3.32-4.74 | 159 | 4.12 (.67) | 3.45-4.79 | 136 | 3.55 (.72) | 2.83-4.27 | 22 |
| Importance of Religion | 4.29 (.93) | 3.36-5.22 | 162 | 4.34 (.91) | 3.43-5.25 | 139 | 4.05 (1.05) | 3.00-5.10 | 22 |

Table 2. *Correlations Among All Variables for the Total Sample*

| Variable | Age in Years | Community Encouragement of Prosocial Behavior | Identification with Community | Importance of Religion |
|---|---|---|---|---|
| 1. Age in Years | --- | | | |
| 2. Community Encouragement of Prosocial Behavior Scale | -.08 | --- | | |
| 3. Identification with Community Scale | .11 | .67*** | --- | |
| 4. Importance of Religion | .13 | .11 | .09 | --- |
| 5. Individual Prosocial Behavior Scale | -.15 | .17* | .23** | .07 |

*Note:* *$p < .05$, **$p < .01$, ***$p < .001$

Table 3. *Correlations Among All Variables Separately by Gender*

| Variable | 1. | 2. | 3. | 4. | 5. |
|---|---|---|---|---|---|
| 1. Age in Years | --- | -.02 | .15 | .19* | -.07 |
| 2. Community Encouragement of Prosocial Behavior | -.25 | --- | .67*** | .03 | .11 |
| 3. Identification with Community | .04 | .66** | --- | .06 | .22* |
| 4. Importance of Religion | .01 | .36 | .15 | --- | -.03 |
| 5. Individual Prosocial Behavior | -.40 | .28 | .21 | .39 | --- |

*Note:* Correlations for women are above the diagonal. Correlations for men are below the diagonal.

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

between identification with community and individual level of prosocial behavior would be moderated by community encouragement of prosocial behavior. Moderation would be shown by a significant interaction between community encouragement of prosocial behavior and identification with community. To reduce unnecessary collinearity between the interaction term and main effects, scores for variables included in the interaction term were centered prior to creating interaction terms. The centered main effects were then used as predictors (Aiken & West, 1991). In the model, gender was included in the first step as a control variable. The second step included community encouragement of prosocial behavior and identification with community. The third step included the interaction between community encouragement of prosocial behavior and identification with community.

As illustrated in Table 4, gender was a significant predictor of individual prosocial behavior, with women reporting more individual prosocial behavior within the past year than men. Identification with community was also significant in predicting individual prosocial behavior and led to a significant increase in $R^2$, with higher levels of identification predicting higher levels of individual prosocial behavior. Community encouragement of prosocial behavior was not significantly related to individual prosocial behavior. The interaction between community encouragement of prosocial behavior and identification with community was nonsignificant, indicating that community encouragement of prosocial behavior did not moderate the links between identification with community and individual prosocial behavior.

Table 4. *Regression Predicting Individual Prosocial Behavior*

| | Step 1<br>b (se) | Step 2<br>b (se) | Step 3<br>b (se) |
|---|---|---|---|
| Gender | -.57 (.16)*** | -.55 (.15)*** | -.54 (.16)*** |
| Identification w/ Community | --- | .29 (.14)* | .31 (.14)* |
| Community Encourages PSB | --- | -.03 (.17) | .00 (.17) |
| Identification w/ Community X Community Encourages PSB | --- | --- | .22 (.19) |
| $R^2$ at each step | .08 | .12 | .13 |
| F | 13.05*** | 6.96*** | 5.57*** |
| *df* | 1, 154 | 3, 152 | 4, 151 |
| F change | 13.052*** | 3.69** | 1.34 |

Note: Unstandardized regression weights. Gender was coded as Woman = 0 and Man = 1.

*$p < .05$, **$p < .01$, ***$p < .001$

## DISCUSSION

This study examined the potential links between participants' identification with a social group and their self-reported prosocial behavior. Research suggests that participants behave in ways that are consistent with values that derive from group membership, or that are shared with social group members (Turner & Oakes, 1986). This was tested in two ways. First, associations between importance of religion and individual prosocial behavior were examined based on the argument that religious groups often encourage prosocial values in their members (Sung Pyo Jun, 2005). Second, the extent to which individuals identified with their residential community and their beliefs about whether that community endorsed prosocial behaviors were linked to individual prosocial behavior. The hypothesis that participants who identified as highly religious would report more prosocial behavior was not supported. The relation between identification with community and prosocial behavior was not moderated by the perception that the community valued prosocial behavior. Both were individually associated with prosocial behavior. However, when considered jointly, only identification with community emerged as significant.

### Residential Communities and Prosocial Behavior

Individuals who reported identifying with their community also reported higher levels of prosocial behavior. This link was not moderated by an interaction with a sense of the community encouraging prosocial behavior. Furthermore the sense that the community encouraged prosocial behavior did not make an independent contribution to the prediction of prosocial behavior. There may be so much overlap or likeness between the variables identification with community and community encouragement of prosocial behavior, that the variable community encouragement of prosocial behavior is statistically nonsignificant

in the regression model. Perhaps community members doing nice things for one another is part of what makes a community a pleasant place to live. When prosocial behavior is lacking between members, then individuals may not identify with the community. Conversely, when an individual identifies with his or her community, it becomes the individual's in-group, and he or she then wants to help the group (Turner & Oakes, 1986). Thus, the extent to which individuals who identify with their community see the community as encouraging prosocial behavior may be irrelevant. This may help explain why the variable community encouragement of prosocial behavior was significant at the correlational level but was not significant in the regression model.

**Religious Communities and Prosocial Behavior**

There was also a nonsignificant relation between self-reported importance of religion and individual prosocial behavior. This may be explained by the limitation of using a single item to measure importance of religion. A clearer picture of participants' religiosity may have emerged had additional items been added. For example, questions that tapped into behavioral aspects of religion may have yielded a more valid measure of the extent to which religion impacted participants' day-to-day lives. Perhaps participants' religious behaviors would be more indicative of their commitment to practicing the precepts of their religion, and would then in turn have been associated with prosocial behavior.

Another possible explanation for the lack of significant relation between self-reported importance of religion and prosocial behavior may be that some religious groups explicitly endorse only specific prosocial behaviors and specific targets. For example, a religious group may very clearly endorse the value of donating time or money. However,

the proposed recipient of this endorsement may be the religious group itself and not the donation of time or money to all individuals in need. There may be enough variability in the messages that particular religious groups send about prosocial behavior that the association between identification with the group and individual behavior may not be apparent.

**Toward a Socioecological Model of Prosocial Behavior**

When studying the link between group membership and the acquisition of social norms, many scholars implicitly adopt a unidirectional view (see for example Saraglou et al., 2005; Sung Pyo Jun, 2005; and Tajfel & Turner, 1985). Specifically, individuals are assumed to adopt the values and norms that are consistent with the social group and behave in line with these values and norms to remain members of the group. The possible bidirectional nature of social norms is generally ignored, but has been examined previously by Bronfenbrenner (2005). Not only can the social norms within an individual's environment powerfully affect his or her development, the individual can also have a profound impact on his or her environment, leading to a change in the values and norms of that environment.

Research provides support for this idea, indicating that it is possible to alter the norms in an institutional school setting so that individuals engage in more prosocial behavior (Battistisch, Watson, Soloman, Schaps, & Soloman, 1991). The question remains as to whether the opposite is also true; can individuals who engage in prosocial behavior alter the group's norms regarding such behavior? If so, under what conditions or in what social environments is this possible? Participants in the study may have been exerting an influence on the norms of their social groups (i.e., their religious or community groups)

which was not measured. It may be useful for researchers to utilize a more socioecological model of prosocial behavior that allows for bidirectional influences between the individual and the context (see for example Carlo & Randall, 2001).

**Methodological Issues**

Several methodological issues present in the study are worth discussing. The first relates to the definition of community. The idea that community is a group of people living and interacting in a common geographical area (McMillan & Chavis, 1986) was never explicitly defined for participants. Community may have been understood by participants differently than intended. However, several of the questions related to community implicitly suggested this definition, for example, "Given the opportunity I would like to move out of my community." Participants also answered a series of questions regarding the geographical region in which they lived prior to answering community questions, for example "How many residents live in your community?" and "What is the name of the county and state you live in?". Thus, although the intended definition was never explicitly stated and it is possible that differences in conceptualization affected results, it is believed that the survey design guarded against this possibility.

A second issue relates to the type of prosocial behaviors that were assessed. Perhaps the blanket measure of prosocial behavior was too general. Because the goal of the study was to examine potential links between prosocial behavior and identification with community groups, it may have been more useful to utilize prosocial behavior items that asked about improving one's community. These could include such questions as donating time to community members in need, donating money to community organizations, etc. Items such as these may relate more strongly to the individual's level of identification with

community. Although two of the current items could be directed towards the individual's community (i.e., raised or donated money for a charitable cause and did volunteer work), the intended target was not explicitly stated.

Because the study was based on self-reports of prosocial behavior, a third issue involves socially desirable responding, or the tendency for participants to present a positive, culturally acceptable image of themselves to researchers (Marlowe & Crowne, 1961), which may have affected outcomes of the study. Although it is a possibility that participants responded in a socially desirable manner, attempts were made to limit this by having participants complete the survey anonymously and mail in the packet rather than directly interacting with the researchers.

Geographical scope and age range are two factors to consider which may affect generalizeability of findings. One might expect that length of time residing in a community would affect community identification. Age range is also a factor that may relate to community identification. Participants ranged in age from 32 to 87 years old, and had been living in their communities for different periods of time. It is logical to assume that younger adults settling into their first homes have probably lived in their communities for shorter periods of time than older adults. Length of time residing in the community may affect identification with community, with those residing for longer periods of time possibly feeling stronger identification. Follow-up correlational analyses, however, did not support this idea ($p > .05$).

**Conclusions and Future Directions**

Social norms have been used to explain a wide range of behaviors including binge drinking when there was a group norm encouraging this behavior (Johnston & White,

2003) and helping a bystander when there was a group norm of altruism (Horowitz, 1971). Although in the current study there was a lack of significant interaction, the positive correlation between individual prosocial behavior and community encouragement of prosocial behavior suggests that social norms matter. Behaving in ways that help and support others is implicitly recognized as fulfilling a social obligation that stems from group belonging. The lack of a significant interaction was a surprise given the existing research linking group norms and prosocial behavior (Saraglou et al., 2005; Sung Pyo Jun, 2005; Turner & Oakes, 1986). Thus, additional research that takes into account the design limitations in the present study and potential moderating variables such as community size is certainly warranted.

**REFERENCES**

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Sage: Newbury Park, CA.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50,* 179-211, doi:10.1016/0749-5978(91)90020-T

Alessandri, G., Vittorio Caprara, G., Eisenberg, N., Steca, P. (2009). Reciprocal relations among self-efficacy beliefs and prosociality across time. *Journal of Personality, 77,* 1129-1259, doi:10.1111/j.1467-6494.2009.00580.x

Aquino, K. & Reed, A., II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology, 83*, 1423-1440, doi:10.1037/0022-3514.83.6.1423

Ashforth, B. E. & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14,* 20-39, doi:10.2307/258189

Bagozzi, R. P., Dholakia, U. M., & Pearo, L. R. K. (2007). Antecedents and consequences of online social interactions. *Media Psychology, 9,* 77-114.

Battistich, V., Watson, M., Soloman, D., Schaps, E., & Soloman, J. (1991). The Child character. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Vol 3, application* (pp. 1-34). New York: Erlbaum.

Becker, P. E., & Dhingra, P. (2001). Religious involvement and volunteering: Implications for civil society. *Sociology of Religion, 62,* 315-336, doi:10.2307/3712353

Bishop, P. D., Chertok, F., & Jason, L. A. (1997). Measuring sense of community: Beyond local boundaries. *The Journal of Primary Prevention, 18,* 193-212.

Blasi, A. (1984). Moral identity: Its role in moral functioning. In W. Kurtines & J. Gewirtz (Eds.), *Morality, moral behavior and moral development* (pp. 128-139). New York: John Wiley.

Bronfenbrenner, U. (2005). The Bioecological Theory of Human Development (2001). *Making human beings human: Bioecological perspectives on human development* (pp. 3-15). Thousand Oaks, CA: Sage Publications Ltd. Retrieved from PsycINFO database.

Buckner, J. C. (1988). The development of an instrument to measure neighborhood cohesion. *American Journal of Community Psychology, 16,* 771-791, doi:10.1007/BF00930892

Burke, P. J. (1991). Identity processes and social stress. *American Sociological Review, 56,* 836-849, doi:10.2307/2096259

Burke, P. J. and Reitzes, D. C. (1981). The link between identity and role performance. *Social Psychology Quarterly, 44*, 83-92, doi:10.2307/3033704

Burke, P. J. and Tully, J. (1977). The measurement of role/identity. *Social Forces, 55,* 881-897, doi:10.2307/2577560

Carlo, G., Eisenberg, N., Troyer, D., Switzer, G., & Speer, A. L. (1991). The altruistic personality: In what contexts is it apparent? *Journal of Personality and Social Psychology, 61*, 450–458, doi:10.1037/0022-3514.61.3.450

Carlo, G., & Randall, B. A. (2001). Are all prosocial behaviors equal? A socioecological developmental conception of prosocial behavior. In F. Columbus (Ed.), *Advances in Psychology Research, Volume III.* (pp. 151-170). Huntington, New York: Nova Science Publishers.

Christakopoulou, S., Dawson, J., & Gari, A. (2001). The community well-being questionnaire: Theoretical context and initial assessment of its reliability and validity. *Social Indicators Research, 56,* 321-351.

Conner, M. & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A review and avenues for further research. *Journal of Applied Social Psychology, 28,* 1429-1464, doi:10.1111/j.1559-1816.1998.tb01685.x

Crandall, C. S. (1988). Social contagion of binge eating. *Journal of Personality and Social Psychology, 55,* 588-598, doi:10.1037/0022-3514.55.4.588

Crandall, C. S., Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology, 82,* 359-378, doi:10.1037/0022-3514.82.3.359

Eagly, A. (2009). The his and hers of prosocial behavior: An examination of the social psychology of gender. *The American Psychologist, 64*(8), 644-658. Retrieved from MEDLINE database.

Eisenberg, N. & Hand, M. (1979). The relationship of preschoolers' reasoning about prosocial moral conflicts to prosocial behavior. *Child Development, 50,* 356-363, doi:10.2307/1129410

Eisenberg, N., Pasternack, J. F., Cameron, E., & Tryon, K. (1984). The relation of quantity and mode of prosocial behavior to moral cognitions and social style. *Child Development, 55,* 1479-1485, doi:10.2307/1130017

Erikson, E. H. (1964). *Insight and responsibility.* New York: Norton.

Farver, J. A. M., & Branstetter, W. H. (1994). Preschoolers' prosocial responses to their peers' distress. *Developmental Psychology, 30,* 334-341, doi:10.1037/0012-1649.30.3.334

Feldman, D. C. (1984). The development and enforcement of group norms. *The Academy of Management Review, 9,* 47-53, doi:10.2307/258231

Gottlieb, D. (1957). The neighborhood tavern and cocktail lounge: A study of class differences. *American Journal of Sociology, 62,* 559-562, doi:10.1086/222103

Hastings, P. D., Zahn-Waxler, C., & McShane, K. E. (2005). We are, by nature, moral creatures: The biology of concern for others. In M. Killen & J. Smetana (Eds.), *The handbook of moral development* (pp. 483–516). New York: Erlbaum.

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice.* Cambridge, UK: Cambridge University Press.

Hogg, M. A. and Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. London: Routledge.

Horowitz, I. (1971). The effect of group norms on bystander intervention. *The Journal of Social Psychology, 82,* 265-273.

Jetten, J., Spears, R., & Manstead, A. S. R. (1996). Intergroup norms and intergroup discrimination: Distinctive self-categorization and social identity effects. *Journal of Personality and Social Psychology, 71,* 1222-1233, doi:10.1037/0022-3514.71.6.1222

Johnston, K. L. & White, K. M. (2003). Binge-drinking: A test of the role of group norms in the theory of planned behaviour. *Psychology and Health, 18,* 63-77. doi:10.1080/0887044021000037835

Kochanska, G., DeVet, K., Goldman, M., Murray, K., Putnam, S. P. (1994). Maternal reports of conscience development and temperament in young children. *Child Development, 65,* 852-868, doi:10.2307/1131423

Kohlberg, L. (1969). *Stage and sequence: The cognitive-developmental approach to socialization.* In D. A. Goslin (Ed.), *Handbook of socialization theory and research.* (pp. 347-480). New York: Rand McNally.

Krupka, E. & Weber, R. A. (2009). The focusing and informational effects of norms on pro-social behavior. *Journal of Economic Psychology, 30,* 307-320. doi:10.1016/j.joep.2008.11.005

Marlowe, D. & Crowne, D. P. (1961). Social desirability and response of perceived situational demands. *Journal of Consulting Psychology, 25,* 109-115.

Marsh, C. P. & Coleman, A. L. (1956). Group influences and agricultural innovations: Some tentative findings and hypotheses. *The American Journal of Sociology, 61,* 588-594, doi:10.1086/221850

McCall, G. J. and Simmons, J. L. (1978). *Identities and Interactions.* New York: Free Press.

McFadden, D. (1977). *Modeling the choice of residential location.* Retrieved March 18, 2010 from *http://cowles.econ.yale.edu/P/cd/d04b/d0477.pdf*

McMillan, D. W. & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology, 14,* 6-23, doi:10.1002/1520-6629(198601)14:1<6::AID- JCOP2290140103>3.0.CO;2-I

Nesdale, D., Durkin, K., Maass, A., Kiesner, F., & Griffiths, J. A. (2008). Effects of group norms on children's intentions to bully. *Social Development, 17,* 889-907. doi:10.1111/j.1467-9507.2008.00475.x

Rachlin, H. (2002). Altruism and selfishness. *Behavioral and Brain Sciences, 25,* 239-296, doi:10.1017/S0140525X02000055

Rest, J. R. (1984). The major components of morality. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Morality, Moral Behavior, and Moral Development.* (pp. 24-38). New York: John Wiley.

Reynolds, S. J. & Ceranic, T. L. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology, 92*(6), 1610-1624, doi:10.1037/0021-9010.92.6.1610

Rosenberg, M. (1979). *Conceiving the self.* New York: Basic Books Inc.

Saraglou, V., Pichon, I., Trompette, L., Verschueren, M., & Dernelle, R. (2005). Prosocial behavior and religion: New evidence based on projective measures and peer ratings. *Journal for the Scientific Study of Religion, 44,* 323-348, doi:10.1111/j.1468-5906.2005.00289.x

Schofield, P. E., Pattison, P. E., Hill, D. J., & Borland, R. (2001). The influence of group identification on the adoption of peer group smoking norms. *Psychology and Health, 16,* 1-16, doi:10.1080/08870440108405486

Sloan, P. A., Berman, M. E., Zeigler-Hill, V., Greer, T. F., & Mae, L. (2006). Group norms and self-aggressive behavior. *Journal of Social and Clinical Psychology, 25,* 1107-1121, doi:10.1521/jscp.2006.25.10.1107

Smith, J. R. & Louis, W. R. (2008). Do as we say and as we do: The interplay of descriptive and injunctive group norms in the attitude-behaviour relationship. *British Journal of Social Psychology,* 647-666, doi:10.1348/014466607X269748

Stanhope, P., Bell, R. Q., & Parker-Cohen, N. Y. (1987). Temperament and helping behavior in preschool children. *Developmental Psychology, 23,* 347-353, doi:10.1037/0012-1649.23.3.347

Stedman, R. C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society and Natural Resources, 16,* 671-685, doi:10.1080/08941920309189

Stets, J. E. and Burke, P. J. (1996). Gender, control, and interaction. *Social Psychology Quarterly, 59,* 193-220, doi:10.2307/2787019

Sung Pyo, J. (2005). Moral differences between Protestants and atheists, and the effects of religion on the morality of Protestants. Retrieved from Inspec database.

Swisher, J. D., Shute, R. E., & Bibeau, D. (1984). Assessing drug and alcohol abuse: An instrument for planning and evaluation. *Measurement and Evaluation in Counseling and Development, 17,* 91-97.

Tajfel, H. & Turner, J. C. (1985). The social identity theory of intergroup behavior. In S. Worcehl & W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 7-24). Chicago: Nelson-Hall.

Thoits, P. A. (1986). Multiple identities: Examining gender and marital status differences in distress. *American Sociological Review, 51,* 259-272, doi:10.2307/2095520

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., and Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* New York: Basil Blackwell.

Turner, J. C. & Oakes, P. J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology, 25,* 237-252.

White, K. M., Terry, D. J., & Hogg, M. A. (1994). Safer sex behavior: The role of attitudes, norms, and control factors. *Journal of Applied Social Psychology, 24,* 2164-2192, doi:10.1111/j.1559-1816.1994.tb02378.x

Youniss, J., McLellan, J. A., & Yates, M. (1999). Religion, community service, and identity in American youth. *Journal of Adolescence, 22,* 243–253, doi:10.1006/jado.1999.0214

# APPENDIX A. IRB APPROVED PROTOCOL

NDSU NORTH DAKOTA STATE UNIVERSITY

Institutional Review Board
Office of the Vice President for Research, Creative Activities and Technology Transfer
1735 NDSU Research Park Drive
P.O. Box 5756
Fargo, ND 58105-5756

701.231.8908
Fax 701.231.8098

Federalwide Assurance #FWA00002439
Expires 4/24/2011

June 17, 2008

Dr. Brandy Randall
Department of Child Development & Family Science
283 E. Morrow Lebedeff Hall

IRB Expedited Review of: **"Multigenerational Gambling & Community Experiences Study"**, Protocol #HE08243
Co-investigator(s) and research team: **Andrea Lang, Renee Lawler, Rebecca Moll, Jenna Hoffert, Melissa McCanney, Sharon Query**

Research site(s): NDSU  Funding: n/a

The protocol referenced above was reviewed under the expedited review process (category # 7) on 6/2/08, and the IRB voted for: ☐ approval ☒ approval, contingent on minor modifications. These modifications have now been accepted. IRB approval is based on the original submission, with revised: protocol and student informed consent form (received 6/17/08).

**Approval expires: 6/1/2009** **Continuing Review Report Due: 5/1/2009**

**Please note your responsibilities in this research:**

- All changes to the protocol require approval from the IRB prior to implementation, unless the change is necessary to eliminate apparent immediate hazard to participants. Submit proposed changes using the *Protocol Amendment Request Form*.
- All research-related injuries, adverse events, or other unanticipated problems involving risks to participants or others must be reported in writing to the IRB Office within 72 hours of knowledge of the occurrence. All significant new findings that may affect risks to participation should be reported in writing to subjects and the IRB.
- If the project will continue beyond the approval period, a continuing review report must be submitted by the due date indicated above in order to allow time for IRB review and approval prior to the expiration date. The IRB Office will typically send a reminder letter approximately one month before the report due date; however, timely submission of the report is your responsibility. Should IRB approval for the project lapse, recruitment of subjects and data collection must stop.
- When the project is complete, a final project report is required so that IRB records can be inactivated. Federal regulations require that IRB records on a protocol be retained for three years following project completion. Both the continuing review report and the final report should be submitted according to instructions on the *Continuing Review/Completion Report Form*.
- Research records may be subject to a random or directed audit at any time to verify compliance with IRB regulations.

Thank you for cooperating with NDSU IRB policies, and best wishes for a successful study.

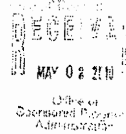
Sincerely,

Teryl Grosz, MS, CIP
IRB Director

# APPENDIX B. CONTINUATION OF IRB APPROVED PROTOCOL

**Institutional Review Board** ...for the protection of human participants in research

North Dakota State University
Sponsored Programs Administration
1735 NDSU Research Park Drive
NDSU Dept #4000
PO Box 6050
Fargo, ND 58108-6050 231-8995(ph) 231-8098(fax)




## Continuing Review or Project Completion Report Form

*Use this form to: 1) request a continuation of IRB approval if a project is currently active (recruiting subjects, collecting data, or analysis of identifiable data), or 2) report completion of a project*

**Protocol Information**

Protocol #: **HE08423** (143) Original approval date*: **June 1, 2008**

Title: **Multigenerational Gambling & Community Experiences Study**

Principal investigator: **Brandy Randall** Co-investigator: **Andrea Lang**

Department: **CDFS** Campus Address: **NDSU Dept. 2915 - P.O. Box 6050**
Phone: **231-8742**

** Protocol records must be updated every 5 years by completing a new protocol form and any relevant attachments, and including it with this report. Use the most recent version of the forms on the IRB website at:* www.ndsu.edu/research/irb.

**Project Status**

☒ Ongoing, and currently active ☐ Complete, abandoned or inactive

Source of current funding**: ☒ N/A

Pending funding proposals**: ☒ N/A

☐ ****Attach copy of final grant application(s), and/or recent report to funding agency**

Research team: *List all other individuals involved in the research (project design/oversight, recruiting participants, obtaining informed consent, intervening or interacting with participants to obtain information/data, and/or handling identifiable information for research purposes). May provide as a separate attachment.*

| Name, dept. or affiliation: | Specify role in research: |
|---|---|
| Courtney Rust, Amanda Haire, HDF 7/11/08 8/29/08 | Research Assistants, data analysis (Courtney will use the data for a thesis) |
| Sharon Query, NDSU Extension 12/19/09 | data analysis |

Continuing Review / Completion Report
NDSU Institutional Review Board
Form revised: Dec 2006

Page 1 of 2
Last printed 4/30/2010 12:40:00 PM

11/10/09 10/9/09

| Joel Hektner, Jim Deal, Margaret Fitzgerald, Greg Sanders, HDFS | Collaborators; data analysis |
|---|---|

2/17/09 10/22/08 Randall – 8/28/08

## Project Summary

Brief summary of results to date:

**Results have shown no significant differences among young adults' gambling attitudes and behaviors from rural and urban communities. Significant correlations have been found between young adults' perceptions of their parent's and grandparent's gambling attitudes and behaviors and their own. Regression analyses have indicated that the link between grandparent gambling attitudes and behavior and young adult gambling attitudes can be partially explained by the grandparent-grandchild relationship quality experienced while growing.**

List all research site(s):

Graduate Center - 1201 North University Drive Fargo, ND; CDFS Department 283 EML Hall

List all presentations or publications that have resulted from this research:

N/A

**Participants:**

| # Currently enrolled: 0 | # Completing since last review: 0 |
|---|---|
| Total # completing (cumulative): 250 | Expected end date of research: June 1, 2011 |

Have any potential participants declined to participate?
☐ No
☒ Yes - provide an explanation and indicate how many participants declined: **16 individuals chose to complete the extra credit alternative to study participation.**

Have any participants withdrawn from the research study?
☒ No
☐ Yes – please explain and indicate how many participants withdrew:

Have there been any complaints about the research study?
☒ No
☐ Yes – please explain:

Will more participants be recruited?
☒ No
☐ Yes* – Indicate approximately how many:
*** Attach a copy of current consent form(s), and any recruitment materials**

Informed Consent. A copy of the approved informed consent form should have been signed by each of the participants in the study (unless a waiver was approved by the IRB), and retained for your records. Has this requirement been met?
☒ Yes
☐ No – explain:

**Risk/Benefit Ratio:**

Have there been any un-anticipated problems involving risks to participants or others?
☒ No
☐ Yes - if not previously reported to the IRB, please describe:

Has any new information resulted from the study, or any literature, that would affect the risk/benefit ratio for new subjects (or for those currently or previously enrolled)?
☒ No
☐ Yes –explain, and indicate how this has been/will be addressed with future, current, or previously enrolled participants:

Have there been any changes/amendments to the protocol (that have not previously received IRB approval) since the last continuing review?
☒ No
☐ Yes - describe:

## Investigator's Assurance

The signature below certifies that:

- information provided in this application is complete and accurate
- each individual involved as a member of the research team has completed human research protections education, and possesses the necessary experience for conducting research activities in their assigned role, and is aware of and will abide by NDSU policies and procedures for the protection of research participants
- the research will continue to be conducted according to the approved protocol
- changes will receive IRB approval prior to implementation
- problems involving risks to participants or others will be promptly reported to the IRB.

[signature] 4/30/10
Principal Investigator signature, date

-----------FOR IRB USE ONLY-------

| | | | |
|---|---|---|---|
| Project is: | ☒ Approved for continuation | ☐ Complete/inactive | ☐ Archive after ______ |
| IRB Signature: | [signature] | Date: 5/24/10 | |
| Reviewed by: | ☐ Full Board - meeting date ______ | ☒ Expedited review category # 7 | |

Current approval period expires: 6/1/2011
Next Continuing Review/Completion Report due: 5/1/2011

*Note that the IRB office will typically notify the investigator a month prior to the due date; however, timely submission of the report is the PI's responsibility*

## APPENDIX C. IDENTIFICATION WITH COMMUNITY SCALE

**Respond to the following on a scale of 1 to 5 with 1 being (*strongly disagree*) and 5 being (*strongly agree*).**

1. I really miss it when I am away too long from my community.

2. I feel happiest when I am in my community.

3. My community reflects the type of person I am.

4. Being a member of my community is like being part of a group of friends.

5. I feel like I belong to my community.

6. Given the opportunity I would like to move out of my community.

7. I think I agree with most people in my community about what is important in life.

8. I think of myself as similar to the people who live in my community.

9. A feeling of fellowship runs deep between me and other people in my community.

10. Living in my community gives me a sense of unity.

11. I am emotionally attached to my community.

12. I feel that I belong in my community.

# APPENDIX D. COMMUNITY ENCOURAGEMENT OF PROSOCIAL BEHAVIOR SCALE

**Respond to the following on a scale of 1 to 5 with 1 being (*strongly disagree*) to 5 being (*strongly agree*).**

1. People can depend on each other in my community.
2. Community members do not feel comfortable asking one another for assistance.
3. There is a sense of common purpose in my community.
4. My community makes you feel good for helping.
5. Community members put a lot of effort into what they do for the community.
6. When something needs to be done in my community the whole community gets behind it.
7. I believe the neighbors in my community would help me in an emergency.
8. I borrow things and exchange favors with my community members.

## APPENDIX E. PROSOCIAL BEHAVIOR SCALE

**How often have you participated in the following activities over the past year? Respond on a scale of 1 to 6 defined as follows: 1 = never, 2 = once in the past year, 3 = a few times in the past year, 4 = at least once a month, 5 = at least once a week, 6 = almost every day or more.**

1. Helped a friend with a problem.
2. Raised or donated money for a charitable cause.
3. Shared in household tasks.
4. Did volunteer work.
5. Gave someone a present or did something nice for someone.
6. Did someone a favor or lent someone money.

# APPENDIX F. LETTER OF INFORMED CONSENT

NDSU NORTH DAKOTA STATE UNIVERSITY

Department of Child Development and Family Science
College of Human Development and Education
P.O. Box [illegible]
Fargo ND [illegible]

[illegible]
Fax [illegible]

**NDSU Research Study**
**Multigenerational Gambling and Community Experiences**

Dear Parent or Grandparent:

My name is Andrea Lang and I am a graduate student from the Department of Child Development and Family Science at North Dakota State University. I am conducting a research project to help understand parent, grandparent, and young adult experiences with gambling, alcohol, and community living. In particular, I am interested in general attitudes, beliefs, and experiences relating to community living and gambling across multiple generations. Results of this study will help us to learn more about the role family has on attitudes, beliefs, and behaviors as well as areas that are important for gambling programs and community development.

Your child or grandchild has agreed to participate in this research project and I invite you to participate as well. Those who have and have not gambled are asked to participate. Your child or grandchild is receiving $10 or course extra credit for their participation in this study. Your participation is entirely voluntary and you may decline or withdraw from participation at any time without penalty. If you decide to participate, please complete the enclosed survey and return it in the postage-paid envelope provided.

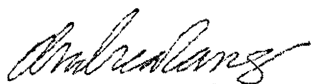
Completing the survey will take approximately 30 minutes of time. The questions ask about general background and demographic information as well as perceptions of and experiences relating to gambling behavior, alcohol use, and community living.

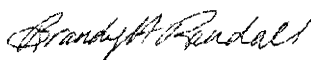
Each survey packet has been marked with a code word selected by your child/grandchild. The code word will help link your responses with those of your child/grandchild participating in this study. Records linking your code word with your name or the name of your child/grandchild will not be stored. Thus, your identity will not be traceable or revealed in the research results. Your child/grandchild will not have access to your responses nor will your responses be discussed with your child/grandchild. Information from this study may be presented at professional conferences or in published reports, and will be primarily in summarized form. Individual responses presented will not include information that could be used to identify specific individuals.

NDSU is an equal opportunity institution

If you have questions about this project, or would like to receive a copy of the results, please feel free to contact me by phone, (701) 231-8904, or email, Andrea.M.Lang@ndsu.edu. If you have questions about the rights of human participants in research, or would like to report a problem, you may contact the NDSU Institutional Review Board Office at (701) 231-8908 or ndsu.irb@ndsu.edu.

Thank you for your participation in this research project!





Andrea M. Lang, Graduate Student
Child Development and Family Science
NDSU, EML 283
Fargo, ND 58105
Phone: (701) 231-8904
Email: Andrea.M.Lang@ndsu.edu

Dr. Brandy A. Randall, Assistant Professor
Child Development and Family Science
NDSU, EML 283C
Fargo, ND 58105
Phone: (701) 231-8742
Email: Brandy.Randall@ndsu.edu