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AN EXPLORATORY STUDY ON SOCIAL LEARNING THEORY, SOCIAL BOND THEORY, EXPERIENCES WITH POLICE AND DEMOGRAPHIC EFFECTS ON COLLEGE STUDENT ATTITUDES TOWARD POLICE

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STUDENT ATTITUDES TOWARD POLICE

By

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An Exploratory Study on Social Learning Theory, Social Bond Theory, Experiences with Police and Demographic Effects on College Student Attitudes Toward Police

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Research on public attitudes toward police is principally conducted through survey methods focused on analyzing the effects of experiences with police, satisfaction with police services and respondent demographics. Most research collects data from the general public, which overall reports high levels of satisfaction with the police. However, few studies focus on the college student population and fewer integrate theoretical frameworks to explore this complex issue.

This research incorporates tenets from social learning and social control theories as a conceptual framework from which the analysis is built. It also explores the role that personal and vicarious contact and demographic influences play in variations among college student attitudes toward police.

To collect data for this study an internet-based survey instrument was sent electronically to every part-time and full-time student at The University of Montana attending classes in the fall 2011 semester. Questions asked respondents to report on their attitudes toward police, orientation toward crime and alcohol use, direct and vicarious experiences with police, as well as, items derived from empirically validated social learning and social bond concepts. Similar questions pertaining to the individual's understanding of their friends and family experiences with police and criminal orientations were also included. Ordinary least squares regression is used to evaluate social learning, social bond, vicarious and direct experiences with police and demographic variable's abilities to predict variations in college student attitudes toward police.

The study's results show that social learning and social bond derived variables, as well as, vicarious and direct experiences with police explain more of the variation in attitudes towards police than demographic variables. The social learning model explains the most variation in attitudes toward police compared to all the other stand-alone models. A complete model that incorporates all the variables provides the most robust prediction for the variation in attitudes toward police. A discussion of the limitations of the current study and recommendations for future research is also provided.

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<u>Introduction</u>

 Social scientists have been studying attitudes toward the police for several decades (Liu

and Crank 2010; Reisig and Parks 2000; Frank, Smith and Novak 2005). A spark in the 1960s,

due to urban riots, fueled academic interest in public views of the police that ignited a large scale

effort to understand the factors that influence citizen's attitudes toward the police. Negative

occurrences, including police brutality, during the civil rights movement and Vietnam antiwar

protests showcased the tensions that were arising between the police and the public. To

exacerbate the situation, many urban communities experienced conflict with the police

throughout the 1970s and into the 1990s. (Shafer, Huebner and Bynum 2003).

 Studies examining public attitudes toward the police have been conducted to inform

public policy (Skogan 2005; Stack, Cao and Adamzyck 2007; Lui and Crank 2010), understand

how demographic circumstances affect the propensity to be satisfied with the police and their

services (Shafer, Huebner and Bynum 2003; Rosenbaum et al. 2005; Skogan 2005; Frank, Smith

and Novak 2005; Haba, Sarver, Dobbs and Sarver 2009; Dowler 2002; Weitzer and Tuch 2005;

Mbuba 2010; Tyler 2005; Reisig and Parks 2000; Hinds 2009), explore how experiences with

police frames one's attitudes towards them (Frank et al. 2005; Hinds 2009; Dai and Nation 2009;

Reisig and Parks 2000; Skogan 2005; Rosenbaum et al. 2005; Weitzer and Tuch 2005) and

explain how neighborhood contexts influence attitudes toward police (Schuck et al. 2008;

Schafer, Huebner and Bynum 2003).

 Of important note, prior research has commonly found that the public overall is satisfied

with the police (Frank et al. 2005; Shuck et al. 2008; Schafer et al. 2003). However, according to

Schafer, Rosenbaum and Hawkins (2003:443), "…variations have been found based on

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respondent characteristics, neighborhood contexts, contact with the police and the way in which research questions are worded." Many studies focused on analyzing public attitudes toward police have drawn upon an extensive body of empirical research. However, Lui and Crank (2010:102) argue that, "most of the literature focuses on empirical findings without discussing underlying theories." They suggest that research based on theory is necessary to find where attitudes toward the police originate and to make policy relevant to the public's opinions.

This research incorporates Lui and Cranks's (2010) recommendations to use tenets from social learning and social control theories as a conceptual framework. It also explores the role that personal and vicarious contact and demographic influences play in variations among college student attitudes toward police. The paper begins with a discussion of social learning and social control theories and how they are important frameworks for examining issues within a college student population. After the theoretical overview, a review of the literature that has examined attitudes toward the police is presented. Specific attention will be given to prior studies that have examined college student populations. This is followed by a brief discussion of the data, an overview of the measures used, and the findings from ordinary least squares examination of theoretically derived hypotheses. The final section of the paper is oriented toward a discussion of the research findings, contributions to the literature, and implications for future research.

Theoretical Overview

Social Learning Theory (SLT)

Lui and Crank (2010:103) suggest that Akers' Social Learning Theory (SLT) is a viable option to use in investigations examining attitudes toward police. As Krohn (1999:462) points out, SLT is versatile and can be applied to deviant acts "ranging from cheating behavior to rape". SLT provides a theoretical foundation that explains the process of learning to commit deviant

acts and research based on prior tests of the hypotheses derived from the theory are strongly

supported (Krohn1999: 462). The current study uses principles from SLT to more

comprehensively understand how and through what learning processes college student attitudes

toward police are formed.

SLT's differential association variable was first conceived by Sutherland in his

differential association theory. One of the key tenets that emerged from this work was the notion

that "one learns criminal behavior in a process of symbolic interaction with others, mainly those

in primary groups, who present the person with both criminal and anti-criminal patterns,

techniques, motivations, and definitional stances toward the legal norms" (Akers 1998:27). Warr

and Stafford (1991:853) say that Sutherland's theory's primary feature is its focus on how

attitudes are transferred between individuals resulting in a transmission of delinquent behaviors

between actors. Akers (1998:46) states that SLT integrates Sutherland's theoretical framework

while expanding on differential association and definitions. Akers (1998) argues that "intimate

personal groups," which includes friends and family, are the most influential people on an

individual and are the primary contributors in molding conforming and/or deviant behaviors.

Secondary and reference groups can also be significant contributors.

> [S]chool, friends, recreational, and other peer groups become more important; later
> in life, the significant influences come from spouses, friendship groups, work
> groups…the law and authority…as well as mass media and other more remote
> sources of attitudes and models, have varying degrees of effect on the individuals
> propensity to commit criminal and delinquent behavior (Akers 1998:60).

Differential association alone cannot explain how one becomes delinquent or refrains from

committing delinquent acts. A mechanism for receiving rewards and/or reprimands for

committing specific behaviors dictates how an individual will internalize "acceptable" behavior

within their social groups. This "differential reinforcement" is intertwined with differential

association as it is the social groups themselves that provide the feedback necessary to reinforce behavior.

Differential reinforcement is defined in its most basic form as: "when one is faced with two alternative acts, producing and sustaining similar consequences, they will choose the action that provides them the highest desirable rewards"(Akers 1998:67). Akers (1998:67) states that this "is relevant for the explanation of criminal behavior because it applies to any given episode, event, or situation in which there is the opportunity either to violate the law or to refrain from doing so." The likelihood of an act being repeated is impacted directly by outcomes that the person views as rewarding. Rewards for behavior can come in many forms like money, prestige, approval from others, and social advancement. Akers (1998:79) states, "The greater the value or amount of rewards for the person's behavior, the more frequently it is rewarded, and the higher the probability that it will be rewarded, the greater the likelihood that it will occur and be repeated." Akers (1998:111) says differential reinforcement has been measured in various forms in research through questions pertaining to the respondent's opinion of peer approval or disapproval towards their actions, parental sanctions, or other consequences of one's behavior.

The core of this study is analyzing people's attitudes toward or definitions of police. These are formed through the entangled effects of differential association with others and the reinforcement of behavior from them. A discussion about definitions is necessary to link the effects of differential association and reinforcement to attitude development.

Definitions are an individual's meaning and attitudes that he or she associates with a given behavior. Definitions can be general or specific. General definitions include all attitudes that align one's behaviors with the norms of society, which are set by religion, morals and other conventional values that define appropriate conforming behavior and inappropriate deviant

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behavior. Specific definitions are an individual's orientation to acute behaviors and series of acts. For example, a college student may believe that stealing from others is morally wrong and believes in the laws against this behavior. Thus, he or she will not commit this crime. However, that same college student may believe that it is acceptable to drink alcohol underage and will violate underage drinking laws. This phenomenon occurs through positive or neutralizing definitions that the individual holds toward behaviors. Positive definitions make the behavior acceptable and morally sound. Neutralizing definitions provide excuses and justifications for why a behavior is permissible (Cullen and Agnew 2006:136). Both forms of definitions construct ways for the individual to behave in a manner that allows for guiltless action.

Definitions are also situational and contextual. Akers (1998:84-85) states, "Those that customarily accompany or are present in reinforcement (or punishment) of particular behavior come to be associated with it and become conditioned cues indicating that reinforcement is to be expected." The social setting allows the individual to predict by whom and how a specific behavior will be reinforced. In sum, the greater the stimuli that are present in a situation where a behavior has been reinforced, the more likely that the behavior will occur again in the same setting.

SLT posits that peer definitions and reinforcements are key determinates of an individual's definitions of deviance. College is the first time most people are provided an opportunity to be free from parental oversight while being able to choose the peer groups they want to associate with. Depending on the group, a person may learn new views about the police as well as behaviors to use when in the presence of police. Friends and parents/guardians can provide secondary or vicarious experiences with police through sharing knowledge and attitudes about police with the individual. Those experiences, coupled with direct experiences with the

police, will frame a person's attitudes toward them. Another theory, social control theory, has also been empirically tested as to its effectiveness in predicting crime and delinquency for the college student population (Payne and Salotti 2007:554).

Social Bond Theory (SBT)

Hirschi's Social Bonding Theory (SBT), a major social control theory, seeks to explain why individuals do not commit crime and instead, conform to the conventional norms and rules of society. SBT posits that " individuals who were tightly bonded to social groups, such as the family, the school, and peers, would be less likely to commit delinquent acts" (Bernard, Snipes and Gerould 2010:208). Lilly Cullen and Ball (2007) and Cullen and Agnew (2006) state that SBT is one of the most tested theories in the criminological field. There are four primary inter-related components of the social bond. These are attachment, commitment, involvement, and belief (Lilly, et al. 2007:103-104).

According to Bernard et al. (2010), Sampson and Laub (1993), and Hirschi (1969), attachment is the most important aspect of SBT. Attachment is essentially the value one places on his or her relationships with parents, peers, teachers and school. It is the vessel that is necessary for an individual to internalize values and norms (Bernard et al. 2010:208). Cullen and Agnew (2006: 221) state,

> The norms of society are by definition shared by the members of society. To violate a norm is, therefore, to act contrary to the wishes and expectations of other people. If a person does not care about the wishes and expectations of other people—that is, if he is insensitive to the opinion of others—then he is to that extent not bound by the norms. He is free to deviate.

Someone who is attached to others will not want to disappoint or offend them and will not commit acts that would do so for fear of losing those attachments (Payne and Salotti 2007:555).

Commitment, the second component of the social bond is "the degree to which the individual's self-interest has been invested in a given set of activities" (Lilly et al. 2007:104). These activities could include such things as gaining an education, starting and building a business, and acting a certain way to uphold a reputation. The majority of people in an organized society, gain resources, reputations, and future opportunities and aspirations, which keep them from committing crime due to the risk of losing that social capital (Cullen and Agnew 2006:222).

Involvement is the third component of the social bond. It represents time spent in conventional activities. The rationale behind involvement is simple: those who are heavily involved in conventional activities will simply not have enough time to engage in delinquent behaviors (Payne and Salotti 2007: 555). According to Cullen and Agnew (2006:223) "The person involved in conventional activities is tied to appointments, deadlines, working hours, plans, and the like, so the opportunity to commit deviant acts rarely arises."

The final component of the social bond is belief. Hirschi (2002) states that belief in the laws that govern society can greatly reduce one's likelihood to become delinquent. Hirschi (2002:200) says, "we take the view that definitions favorable to violation of law are rooted in the absence or weakness of intimate relations with other persons, especially in most cases the parents." SBT articulates a causal order for belief that begins with attachment to parents, which produces an individual's approval for authority. This process yields a belief in conformity, which is constructed when one binds their own conduct to the laws governing society, "therefore, an individual with strong belief will be less likely to engage in criminal behavior" (Payne and Salotti 2007:555). Cullen and Agnew (2006:225) add,

> In chronological order, then, a person's beliefs in the moral validity of norms are, for no teleological reason, weakened. The probability the he will commit delinquent acts is therefore increased. When and if he commits a delinquent act, we may justifiably use the

weakness of his beliefs in explaining it, but no special motivation is required to explain
either the weakness of his beliefs or, perhaps, his delinquent acts.

College students are pursuing a future using conventional means through formal
education. To succeed in this environment, a vast majority will need to be attached to at least
their school, but attachment to parents and peers also play a part in their experiences at their
institution. Commitment to gaining an education becomes a buffer against crime, as students will
have more to lose than simply the possibility of a fine or time in jail. Involvement through jobs,
school, and all the extra-curricular activities that come with college taxes a student's time.
Students are simply too busy to commit criminal acts. Belief in conventional rules stems from
the student's primary socialization. These beliefs are challenged in the higher education setting
as a student becomes attached to new peer groups and a new school while parents have a
lessened influence in a student's day-to-day activities. As students gain new understandings of
the world around them they may align their beliefs to conventional rules accordingly. Therefore,
belief is formed through one's attachments, commitments and involvement.

Analyzing SLT and SBT and College Student Attitudes Toward the Police

Payne and Salotti (2007) argue that both social learning and social control theories could
easily be expanded to cover crime committed by college students. Their research found support
for correlations between SLT derived factors and crime and drug involvement, concluding that
"peer reinforcement of criminal behavior has a significant effect on an individual's criminal
participation" (Payne and Salotti 2007:567). In their analysis, the researchers found that peer
drug use significantly affected the respondents' reported drug use, property crime and violent
crime. Specifically for the target population of the proposed investigation, the findings "suggest
that during college, a time when most individuals begin to become independent and separated

from the influence of their parents, peers have the greatest influence on behavior" (Payne and Salotti 2007:567).

The analysis also found support for variables derived from SBT. Specifically the findings showed that, "People who are attached to their classes and professors and who legitimize conventional rules and norms are less likely to engage in crime or drug use" (Pg 566). Surprisingly, Payne and Salotti (2007:567) found that students who were committed to extra-curricular activities were more likely to engage in property and violent crime. Payne's and Salotti's (2007) findings support the inclusion of variables from both SLT and SBT perspectives. Payne and Salotti (2007:568) found significance for both social control and social learning theories when included in their regression models: "Overall, the strongest predictors of criminal behavior were belief in conventional rules, attitudes favorable to drug use, peer drug use, and peer reinforcement." While Payne's and Salotti's (2007) research looked specifically at how these two theories correlate with criminal activity and drug use, the current study expands the inquiry to include direct and vicarious experiences with the police that can result from college student behaviors and how these, when coupled with control variables, affect overall attitudes toward police.

Students who enter into college may find themselves receiving new rewards for certain behaviors through new associations. While their primary social groups and subsequent reinforcements may lead them to believe a certain behavior should be punished, their new social groups may provide rewards for the same behavior. If that group is elevated to an "intimate group," their rewards for certain behaviors may soon outweigh the punishments from other less influential groups. New behaviors may be internalized and perceived as acceptable by the individual through a process of differential reinforcement and association. New definitions for

behaviors are formed through this process. One's belief in conventional rules may also shift during this process. Akers (1998:62) argues, "The groups with which one is in differential association provide the major social contexts in which all the mechanisms of social learning operate. Not only do they expose one to definitions, they present models to imitate and mediate differential reinforcement for criminal or conforming behavior." Differential association is the mechanism through which people are exposed to positive and/or negative attitude development toward police. The groups that one associates with influence how they themselves perceive police behavior and help shape their own definitions for police behavior and the institution of authority that police represent. Lui and Crank (2010:103) state, "attitudes are largely shaped by their social-psychological context and emerge as a by-product of learning and socialization". Furthermore, Lui and Crank (2010) say "Any effort to put the police in a more favorable light would have to come form other authority figures early in a person's life, particularly parents" (pg. 104). Those individuals who continually interact with and find importance in peer groups who also have negative views of authority that also are regularly in conflict with police will more likely hold more negative attitudes toward police than those who associate with peer groups who uphold policing as a service and important aspect of public safety. Furthermore, associations with deviant peers may increase the likelihood that an individual will come into contact with the police. This could perpetuate negative definitions toward law enforcement, especially if the peer group provides positive reinforcement for disrespecting officers and being suspicious of police services. These theoretical paradigms provide a foundation for informed research to be conducted.

Literature Review

Demographic Factors Influencing Public Attitudes of the Police

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Empirically, race is one of the most consistent predictors of attitudes toward criminal justice institutions (Weltzer and Tuch 2005). Research has shown that African Americans perceive police positively, but at a lower rate than Whites (Reisig and Parks 2000; Frank et al. 2005; Rosenbaum et al. 2005; Schuck et al. 2008; Weitzer and Tuch 2005). Tyler (2005), analyzed trust and confidence in the police and found that the public moderately trusted the police. However, minority group members were more distrustful of the police than Whites. Tuch and Wietzer (2005) collected data that included Whites and a large subsample of Hispanics and African Americans. The researchers conducted a telephone survey that measured people's overall satisfaction with the police and found that the perception of effective crime control is a strong predictor of public confidence in the police for all groups (Tuch and Wiezter 2005).

Age, gender, income and education have been examined in prior research with mixed results (Rosenbaum et al. 2005; Frank et al. 2005; Hinds 2009; Weitzer and Tuch 2005) Frank et al. (2005:222) report that respondents with lower levels of household income had less favorable attitudes toward the police than wealthier respondents. Also, respondents with lower levels of education expressed less favorable attitudes toward the police than those who reported higher levels of education. Income and education were significant predictors but gender was not a significant predictor for favorable attitudes toward police (Frank et al. 2005) Rosenbaum et al. (2005:344) state that people who are older and have more education hold more favorable attitudes toward police. Weitzer and Tuch (2005) found education and age to be significant predictors while income and gender were not significant. Haba et al. (2009) also found gender to not be a significant predictor for support for police. However, Hinds (2009) discovered females as well as older and higher income respondents held more favorable attitudes toward police. Those variables were also significant predictors. These demographic variables have simply

shown inconsistent findings for their association with perceptions of police and need to be further explored. A person's demographic background influences their attitudes toward police but further exploration is needed to form a comprehensive explanation.

Prior Research on College Student Attitudes Toward the Police

Traditional college students are located in the demographic categories that are most likely to hold unfavorable attitudes toward the police. They are currently pursuing further education but have yet to obtain their college degree. These students are between 18-24 years of age, in a demographic near the peak of potential criminal activity reported in the age-crime curve (Stolzenberg and D'Alessia 2008:79). According to Payne and Salotti (2007:554), "although crime generally occurs less frequently on college campuses than in the overall population, it is still a problem for students." While it may be hard to examine race as in this study, due to the super majority of White students attending The University of Montana, it has been noted above that race is a strong predictor of attitudes toward police.

It is surprising that so little work has focused directly on college student's attitudes towards the police. In particular, little has been written about how college students form attitudes toward the police through direct and indirect contact. The limited research that has been conducted provides much needed insight in to this population. For example, Mbuba (2010:210) states "…the role of higher education in improving public-police evaluations among population groups that conventionally view the police with suspicion needs more attention than it has so far received." He found that the race/ethnicity of students was the most significant factor in determining attitudes toward police with white students holding more favorable opinions of the police than non-white students. He also discovered that male students evaluated the police less

favorably than female students. Negative police encounters resulted in a respondent holding less

favorable attitudes toward the police despite these participants' higher education backgrounds.

Haba et al's. (2009) study of college students also revealed that white students reported

supporting police more than non-white students. Their findings showed no significant differences

in terms of support for the police by gender or academic major. However, criminal justice majors

and those with a stronger feminist orientation were much more supportive of women in policing.

In an international examination, Lambert et al. (2010) researched college students' attitudes from

Bangladesh, Canada, Nigeria and the United States. They found that U.S. students were more

likely than those in the other countries to agree that the police worked hard in their community,

to feel that the police were, in general, friendly, to trust police and to support the view that police

in their communities were civil.

Experiences with the Police

Research has found significant correlations between experiences with police and attitudes

towards police (Rosenbaum et al. 2005; Hinds 2009; Skogan 2005; Theobald and Haider-Markel

2008; Dai and Nation 2009). People's experiences with police are important in molding their

attitudes toward them. Duruse, Schmitt and Langan (2005) say that approximately 43.8 million

persons age 16 or older had at least one direct contact with a police officer. The study was

replicated two years later with the findings showing that 45.2 million individuals had direct

contact with the police. More (2008:219) states that "this is an astounding number and reflects

the actual and potential points of conflict between officers and citizens" Theobald and Haider-

Markel (2008) suggest that researchers should be most concerned with face-to-face interactions

between citizens and the police. Citizens form perceptions of police image and legitimacy during

these interactions. Rosenbaum et al. (2005:344) state, "The most common hypothesis in the literature is that public attitudes are formed by having direct contact with the police."

Research has shown that a more specific determinant, perceived quality of treatment by police during contact, may be an important factor in forming one's satisfaction with police encounters and overall satisfaction with police. However, Rosenbaum at al. (2005:345) argue that only 1 in 5 people come into direct contact with the police. Most learn about police through other venues, including media outlets, family, friends, and other social networks. Rosenbaum et al. (2005:345) refer to these other contacts as "vicarious or indirect experiences" and state that, "even residents without personal encounters often hear about, or know, someone with a direct police encounter." The findings show that vicarious knowledge, pertaining to both positive and negative police encounters, is a significant predictor of one's attitudes toward police. Specifically, positive information from others about the police affects one's attitudes more than negative information from others. However, direct contact with police regardless of who initiated the contact did not affect one's attitudes toward them.

Mbuba (2010:203) in his review of research findings states that "it has been confirmed that negative police encounters produce negative attitudes toward the police, even if the experience was indirect through family members or friends." Weitzer and Tuch (2005:293) found that personal contact was not significant but vicarious experience was found to significantly decrease satisfaction with police. People rely on social networking and others' opinions as a means to gain information. It is necessary to examine both direct and vicarious experiences with police to see how they correlate with the formulation of attitudes toward them.

Disrespectful and coercive police behavior impacts citizens' perceptions as well. Mastrofski, Reisig and McCluskey (2002:520) conclude that "Social scientists have shown that

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disrespectful behavior from the police reduces the citizen's sense of procedural justice and fair play." Findings show that negative experiences have a stronger effect on people's overall attitudes toward the police than positive experiences (Lui and Crank 2010). Schafer et al. (2003) found that if a citizen's contact, voluntary or involuntary, generated dissatisfaction, their satisfaction with police services decreased. A citizen's demographic background coupled with their experiences with the police forms a more thorough foundation for the understanding of the individual's attitudes toward the police. Unfortunately, while the present study asked questions pertaining to satisfaction during encounters, not enough data was received to draw viable conclusions. However, direct and vicarious contacts with police are included in the model but only with "yes" or "no" responses.

Hypotheses

1. Students who report higher approval ratings from their parents and peers for drug use and crime will report having less favorable attitudes toward police.

   a. Peers' reinforcement for both alcohol/drug use and crime will be more highly correlated with a participant's attitudes toward police when compared to parent reinforcement for both alcohol/drug use and crime.

2. Students who hold favorable definitions toward alcohol/drug use will report less favorable attitudes toward the police.

3. Students with strong social bonds will hold more favorable attitudes toward police.

4. Students who have had direct and/or vicarious negative contact with the police will hold less favorable attitudes toward police when compared to those who did not.

5. Contact variables will be more strongly correlated with attitudes toward the police than all other variables.

Data and Methods

Once approval was granted by the Institutional Review Board, UM Legal Services, the Provost and the Vice President for Student Affairs, an internet-based survey instrument was sent

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electronically to every part-time and full-time student at The University of Montana attending classes in the fall 2011 semester. Three emails were sent through The University of Montana's student list serve, via the Information Technology Department, to each student, soliciting their participation during the first three weeks of November, 2011. The survey and emails were constructed using principles outlined by Dillman, Smyth and Christian (2009). A total of 2,108 of 15,642 responded producing a 7.42% response rate. 1,187 had valid responses suitable for the regression analyses that follow. Questions asked respondents to report on their attitudes toward police, orientation towards crime, direct and vicarious experiences with police and attitudes held by their friends and family. Questions pertaining to the individual's understanding of their friends/family orientation towards crime were also included. The survey was pre-tested by thirty-five student users. Their feedback increased the survey instruments usability by making questions and directions more clear and concise while also increasing the survey's questions' reliability and validity.

Measures

Descriptive statistics for all variables used in the analysis are available in Appendix I and frequency distributions for the variables in the analysis are in Appendix II.

Outcome Variable – Attitudes Towards Police

A composite measure of attitudes towards police was constructed using fourteen items that assess perceived police effectiveness, satisfaction with police and satisfaction with police services. This was based on similar measures used in prior research by Dowler (2002), Rosenbaum et al. (2005), Frank et al. (2005), and Schafer et al. (2003). Participants were asked to provide ratings on the following items: "I trust the police", "The police are professional", "The police are helpful", "I have respect for police", "The police are respectful toward citizens",

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"Police use an appropriate amount of force when enforcing the law", "Police provide an important service to the community", "The police protect me from crime", "The police are friendly", "The police are prompt in responding to crime", "The police are fair", "The police prevent crime", "The police solve crime", and "Overall satisfaction with the police." Responses were based on a five-point Likert scale: 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), and 5 (Strongly Agree). The scaled variable resulted in an alpha reliability score of .955, indicating strong internal consistency.

Predictor Variables – Contact with Police

Direct Contact with Police

Direct contact with police was measured with four different variables: citizen-initiated contact, police initiated contact, whether the participant had received a citation from police in the past year and if the citizen had been arrested in the past year, measured with 0 (No contact) and 1 (Contact). If a participant indicated "No contact" the survey would skip forward to the next question in the survey. If a participant indicated "Contact" to any of the four questions, they would be transferred to a separate section in the survey that asked follow up questions before being sent back to what would be the next question if they had indicated "No contact".

Vicarious Contact with Police

Vicarious contact with the police was measured with two different variables: "Have any of your friends or family received a citation from the police?", and "Have any of your friends or family been arrested by the police?" measured with 0 (No) and 1 (Yes). Vicarious contact questions followed the same format as the direct contact with the police questions.

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Predictor Variables – Social Bonding Theory

Belief in Conventional Rules

The composite measure of the respondent's definitions of crime was constructed using nine items. For seven of the nine items in the scale, participants were prompted with theses statements: "The following questions will ask you about how wrong it is for SOMEONE YOUR AGE to engage in various levels of criminal activity. Please respond accurately and honestly." This was followed by a list of crimes: "To purposely damage property", "To steal anything regardless of value", "To hit or threaten to hit someone", "To use illicit drug use not including Marijuana", "To drive while intoxicated", "To initiate un-invited touching including: groping, rubbing, grabbing and kissing", "Have non-consensual sex". The other two items asked the respondent's opinions about "How wrong is it to cheat on exams", and "How wrong is it to plagiarize someone else's work". These two items were prompted with the statement: "The following questions will ask you about your opinions of conventional rules in a college setting. Please answer accurately and honestly." All nine responses were coded as 1 (Very Wrong), 2 (Wrong), 3 (Neutral), 4 (Somewhat wrong), and 5 (Not wrong at all). The observed alpha reliability score of the variable is .742.

Attachment to Parents

The composite measure for attachment to parents was constructed with five items. Participants were prompted with the statements: "The following questions will ask about your opinions of your parent(s)/guardian(s). Please answer the questions accurately and honestly." Followed by a list of these opinions: "I get along with my parent(s)/guardians (s)", "I respect my parent(s)/guardian(s)", "It is important to me that I please my parent(s)/guardian(s)", "I enjoy being with my parent(s)/guardian(s)", and "I care about what my parent(s)/guardian(s) think

about me". The responses were coded as 1 (Strongly disagree), 2 (Disagree), 3(Neutral), 4(Agree), and 5 (Strongly agree). The composite variable "attachment to parents" has a .870 alpha reliability coefficient.

Attachment to College

To gather data on the six items that were used to construct the composite measure for attachment to college, participants were prompted with the statements: "The following questions will ask about your opinions about college, classes and professors. Please answer them accurately and honestly." The following items that asked about college attachment were: "I go to school because education is important for getting a job later on", "I go to school because I'm learning skills that I will need for a job", "I go to school because I think the subjects I'm taking are interesting", "There is a real school spirit at The University of Montana", "I feel like I belong at this school", and "I go to school because I get a feeling of satisfaction from doing what I'm supposed to do in class". The responses were coded as 1 (Strongly disagree), 2 (Disagree), 3(Neutral), 4(Agree), and 5 (Strongly agree). The composite variable "attachment to college" has a .727 alpha reliability coefficient.

Commitment to Extra-Curricular Activities

Six items were used to construct the composite measure for commitment to extra-curricular activities. Participants were prompted with the statements: "The following questions will ask you about your involvement in extra-curricular activities. Please answer the questions accurately and honestly". This was followed by a list of commitment questions: "Participating in community service is important to me", "Participating in academically related programs outside of the classroom is important to me", "Participating in educational/entertaining programs conducted by student affair's entities is important to me…", "Belonging to honor societies and

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other academically related organizations is important to me", "Participating in University of

Montana sponsored intramural sports is important to me", and "The student groups and clubs I

participate in are important to me". The responses were coded as 1 (Strongly disagree), 2

(Disagree), 3(Neutral), 4(Agree), and 5 (Strongly agree). The composite variable "commitment

to extra-curricular activities" has a .775 alpha reliability coefficient.

Predictor Variables – Social Learning Theory

One's own attitudes for Drug/Alcohol Use

A composite measure for one's own definitions for drug/alcohol use was created using

eight items. Data was gathered for these eight items through prompting participants with the

statements: "The following questions will ask you about how wrong it is for SOMEONE YOUR

AGE to engage in various levels of alcohol and marijuana use. Please respond accurately and

honestly." This was followed by a list questions pertaining to drug and alcohol use: "Use

Marijuana daily", "Use Marijuana weekly", "Use Marijuana ever", "Drink alcohol to the point of

being drunk two or more times a week", "Drink alcohol to the point of being drunk, weekly",

"Drink alcohol ever", "Drink alcohol under the legal drinking age of 21", and "Use alcohol with

Marijuana". The responses were coded as 1 (Very Wrong), 2 (Wrong), 3 (Neutral), 4 (Somewhat

wrong), and 5 (Not wrong at all). The composite variable "definitions for drug/alcohol use" has a

.908 alpha reliability coefficient.

Peer Reinforcement for Drug/Alcohol Use

A composite measure for one's perceptions of peer reinforcement for drug/alcohol used

the same items as one's own definitions for drug/alcohol use. However, the statements prior to

the questions were: "The following questions will ask you to rate what your CLOSE FRIENDS'

reactions would be if they knew you used alcohol and drugs. Please answer the questions

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accurately and honestly." Also different were the response categories. Instead of a scale ranging from "Very wrong" to "Not wrong at all", the respondent could chose the following coded responses to each item: 1 (Very disapproving), 2 (Disapproving), 3 (Neutral), 4 (Approving), and 5 (Very approving). The composite variable "peer reinforcement for drug/alcohol use" has a .923 alpha reliability coefficient.

Parent Reinforcement for Drug/Alcohol Use

A composite measure for one's perceptions of parent reinforcement for drug/alcohol used the same items as peer reinforcement for drug/alcohol use. However, the statements prior to the questions were: "The following questions will ask you to rate what your PARENT(S)/GUARDIAN(S) reactions would be if they knew you used alcohol and drugs. Please answer the questions accurately and honestly." The respondent could choose the same coded responses as "peer reinforcement for drug/alcohol use" for each item. The composite variable "parent reinforcement for drug/alcohol use" has a .884 alpha reliability coefficient.

Parent Reinforcement for Crime

A composite measure for parent reinforcement for crime used the same items as one's own definitions of crime as well. However, the statements prior to the questions were: "The following questions will ask you to rate what your PARENT(S)/GUARDIAN(S) reactions would be if you committed a variety of criminal acts. Please answer the questions accurately and honestly." The respondent could choose the same coded responses as peer reinforcement for crime. The composite variable "parent reinforcement for crime" has a .828 alpha reliability coefficient.

Control Variables

Control variables included in the analysis include race/ethnicity, income, sex, class standing, education and age. These variables were found to be important in prior research. Respondents could choose from the following list to indicate their race/ethnicity: Asian/Pacific Islander, White/Caucasian, Hispanic/Latino, Black/African American, American Indian/Native American or other. Their family's combined household income ranged from 1 ($0-$10,000), 2 ($10,001-$24,999), 3 ($25,000-$34,999), etc. to 10 ($95,000 or more). Sex was broken into three different categories: 1 (male), 2 (female), and 3 (other). Class standing ranged from 1 (freshman), 2(sophomore), etc. to 5 (Graduate student - Masters Degree) 6 (Graduate Student – PhD Degree), and 7 (Law School). Respondents were asked "Which of the following is the highest level of education completed by either of your parents or guardian?" to gather data on education in their household. The responses ranged from 1 (Elementary school), 2 (Junior High/Middle School), etc. to 9 (PhD/Law degree). Age was a continuous variable that the respondent was asked to enter their exact age into the response category.

Bivariate Analysis

Table 1 provides the bivariate analysis between the variables used to predict attitudes toward police in the multivariate model that follows. Consistent with prior research, the findings show race/ethnicity to be significantly correlated at the 99% confidence level with attitudes toward police. Specifically, non-white respondents report more negative attitudes toward police than white respondents. Gender also is significantly correlated with attitudes toward police at the 99% confidence level. This finding suggests that women hold more favorable attitudes toward police than men. Class standing, age, income and highest education completed by parent are not significant predictors for attitudes toward the police.

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All SBT variables are significantly correlated at the 99% confidence level with attitudes toward police except peer attachment, which was dropped from the multivariate regression analysis because it was not a significant predictor and did not contribute anything more than shared variation with other predictors in the model. The bivariate findings show that respondents' who hold stronger beliefs in conventional rules, report better parental and college attachment and are more committed to extra-curricular activities, also hold more favorable attitudes toward the police.

SLT variables were all also significantly correlated, except peer reinforcement of crime. Peer reinforcement was dropped from the multivariate analysis due to the inability to contribute any unique variation to the model. Attitudes favorable to drug use, parents and peers reinforcement of drug use and parents reinforcing crime are negatively correlated with favorable attitude toward police at the 99% confidence level. These findings suggest that respondents who have more favorable attitudes toward drug use and are reinforced by parents and peers for their drug use hold less favorable attitudes toward police. Also, respondents who have parents that approve of criminal activity hold less favorable attitudes toward police.

All contact variables are significantly correlated with attitudes toward police at the 99% confidence level except citizen-initiated contact, which was correlated at the 95% confidence level. Participant initiated contact with police is the only contact variable that was positively correlated with attitudes toward police. This indicates that participants who initiated contact with police in the last year hold more favorable attitudes toward them. The other contact variables are all negatively correlated with attitudes toward police. This shows that all other types of contact, besides citizen initiated contact, result in participants holding less favorable attitudes toward police. Surprisingly, the most negatively correlated contact variable is police initiated contact. It

was expected that citation and arrest would produce stronger correlations due to the perceived more negative nature of that event, but this is not the case. Regression analysis explains these variable's effects further.

Table 1. Bivariate Analysis with Attitudes Toward the Police

Variables	Pearson's C.	n
Non_White	-.110**	1263
Female	.080**	1263
Class Standing	-0.006	1274
Age	-.018	1269
Income	.046	1223
Highest Education Completed by Parent	-.028	1267
Conventional Rules	.232**	1381
Parental Attachment	.176**	1313
College Attachment	.251**	1301
Commitment to Extra-Curricular Activities	.191**	1290
Attitudes Favorable to Drug Use	-.385**	1485
Friends Reinforce Drug Use	-.331**	1457
Parents Reinforce Drug Use	-.320**	1442
Parents Reinforce Crime	-.196**	1340
Police Inititiated Contact	-.226**	1617
Citizen Initiated Contact	.054*	1591
Citiation Received in Past Year	-.166**	1586
Arrested Past Year	-.213**	1569
Friends and Family Citation	-.118**	1559
Friends and Family Arrest	-.171**	1537

    * Correlation is significant at the .05 level (two-tailed)
    ** Correlation is significant at the .01 level (two-tailed)

Logic of the Multivariate Analysis

Ordinary least squares regression was used to analyze the effects of the multiple independent variables on one dependent variable, attitudes toward police. This allows the researcher to explore the effects of different independent variables while holding constant all other variables in the model. Five different models were introduced in order to examine the effects of demographics, SLT, SBT and the contact variables on the variance found in attitudes towards police.

Multivariate analysis

Table 2 presents findings from ordinary least squares regression estimates. The analysis contains five models used to explore the determinants of attitudes toward police. These include a demographic variable model (model 1), SBT model (model 2), SLT model (model 3), sources of contact model (model 4) and a full model containing all of the predictors in the previous four models (model 5). Diagnostics procedures based on the residuals in the models revealed no apparent deviations from the assumption of normally distributed errors. Leverage tests showed that in no instance was a single cases inclusion or deletion influential enough to alter the pattern of findings and tests for multicolinearity showed no evidence of multicolinearity that could bias the slope estimates presented in the models..

Model 1 explains 2.2 percent of the variation in attitudes toward police and only race/ethnicity (β= -.126) and gender (β= .092) were significant predictors. The findings show that whites hold more favorable attitudes toward police than minorities and females hold more favorable attitudes toward police than males. The race/ethnicity finding is consistent with prior research in public attitudes toward police.

Model 2 SBT variables account for 12.2 percent of the variation in attitudes toward police. Belief in conventional rules ($\beta= .210$), parental attachment ($\beta= .089$), college attachment ($\beta= .143$), and commitment to extra-curricular activities ($\beta= .091$) are all significant predictors and are positively associated with favorable attitudes toward police. Belief in conventional rules has the strongest effect on attitudes toward police showing that it is the most influential variable in predicting attitudes toward police in model 2. The findings show that respondents who believe in conventional activities, are attached to parents and college and are committed to extra-curricular activities hold more favorable attitudes toward police. These findings support hypothesis 3.

The findings in Model 3 show that the combined influence of SLT explains 16.7 percent of the variation in attitudes toward police. Attitudes toward drug use ($\beta= -.239$), friends reinforcing drug use ($\beta= -.111$), parents reinforcing drug use ($\beta= -.078$), and parents reinforcing crime ($\beta= -.104$) are significant but negatively related to attitudes toward police. One's own attitude toward drug use is the strongest SLT predictor of attitudes toward police. The findings show that respondents who have peers and parents who approve of drug use, have parents who approve of criminal activity and have attitudes favorable of drug use, hold less favorable attitudes toward police.

The sources of contact variables in Model 4 explain 10.6 percent of the variation in attitudes toward police. Police-initiated contact ($\beta= -.162$), arrested in past year ($\beta= -.173$), friends and family citation ($\beta= -.056$), and friends and family arrest ($\beta= -.111$), are all significant and negatively associated with attitudes toward police. Citation received in the past year is no longer a significant predictor in the multivariate model. Citizen initiated contact ($\beta= .056$), is significant and is the only positively correlated variable with attitudes toward police. The

findings show that respondents reporting police initiated contact, being arrested in the past year, knowing that their friends or family received a citation and knowing that their friends or family were arrested result in holding less favorable attitudes toward police. However, respondents who initiated a contact with a police officer hold more favorable attitudes toward police. Arrested in the past year has the highest coefficient, making it the strongest predictor of attitudes toward police.

When all of the predictors are included in the analysis, the equation in Model 5 explains 27.4% of the variation in attitudes toward police. Race/ethnicity (β= -.128), attachment to college (β= .141), attitudes favorable to drug use (β= -.203), police initiated contact (β= -.115), and arrested in the past year (β= -.132) continue to contribute significant effects in the full model and do so at the 99% confidence level. Gender (β= -.064), attachment to parents (β= .068), and parents reinforcing drug use (β= -.080), also continue to contribute significant effects in the full model but do so at the 95% confidence level. Gender is the only variable that changes correlation direction in model 5. In the full model, gender is negatively related to attitudes toward police, which indicates that men hold more favorable attitudes toward the police than women. Interestingly, the effect of belief in conventional rules moderated to the point of non-significance in the full model. In the SBT equation in Model 2, this was the strongest predictor. Attitudes favorable to drug use has the highest coefficient of all the variables while remaining significant at the .001 level in model 5. This indicates that it is the best predictor of attitudes toward police in the full model. The full model shows that white men who are attached to their parents and college while holding attitudes unfavorable to drug use and receiving negative reinforcement from parents for drug use hold more favorable attitudes toward police.

Additionally, those who have not been contacted nor arrested by the police have more favorable attitudes toward the police.

Table 2. Regression Analysis of Contol, Social Bonding, Social Learning, Sources of Contact Variables With Attitudes Toward the Police

Variables	1	2	3	4	5
Non_White	-.126***				-.128***
	-4.904 (1.123)				-5.003 (.993)
Female	.092**				-.064*
	2.27 (.716)				-1.60 (.668)
Class Standing	.001				.04
	.004 (.233)				.31 (.207)
Age	-.015				-.022
	-.02 (.043)				-.03 (.04)
Income	.046				.028
	.176 (.126)				.11 (112)
Highest Education Completed by Parent	-.038				-.052
	-.230 (.199)				-.318 (.176)
Conventional Rules		.210***			.06
		.589 (.075)			.174 (.091)
Parental Attachment		.089***			.068*
		.302 (.093)			.232 (.093)
College Attachment		.143***			.141***
		.512 (.107)			.50 (.103)
Commitment to Extra-Curricular Activities		.091**			.048
		.245 (.077)			.129 (.076)
Attitudes Favorable to Drug Use			-.239***		-.203***
			-.334 (.049)		-.28 (.051)
Friends Reinforce Drug Use			-.111***		-.062
			-.177 (.055)		-.097 (.058)
Parents Reinforce Drug Use			-.078*		-.08*
			-.163 (.069)		-.166 (.072)
Parents Reinforce Crime			-.104***		-.034
			-.530 (.137)		-.182 (.164)
Police Inititiated Contact				-.163***	-.115***
				-3.901 (.652)	-2.702 (.675)
Citizen Initiated Contact				.056*	.032
				1.404 (.613)	.779 (.625)
Citiation Received in Past Year				-.05	-.05
				-1.443 (.799)	-1.428 (.821)
Arrested Past Year				-.173***	-.132***
				-5.659 (.810)	-4.311 (.888)
Friends and Family Citation				-.056*	-.044
				-1.493 (.677)	-1.156 (.693)
Friends and Family Arrest				-.111***	-.011
				-2.683 (.622)	-.262 (.645)
Adjusted R^2	.022	.122	.167	.106	.274

Note: For each variable, the standardized coefficient is shown in the top row and the unstandardized coefficient and standard error (in parentheses) are shown in the bottom row.

*p<.05   **p<.01   ***p<.001   (two-tailed)

<u>Discussion and Conclusion</u>

The current study followed Lui and Crank's (2010) recommendation to integrate theoretical frameworks into the study of public attitudes toward police by analyzing social learning theory and social control theory with direct and vicarious contact and empirically validated demographic variables. Correlation and regression analysis produced important findings that in large part, reaffirmed results in prior research.

Race/ethnicity was the most significant demographic predictor of attitudes toward police with non-whites holding less favorable attitudes toward police. Gender differences were also observed. In the bivariate analysis, women held more favorable attitudes toward police, in the full model males were found to hold more favorable attitudes toward police. In both parts of the analysis gender differences were minimal.

> Hypothesis 3: Students with strong social bonds will hold more favorable attitudes toward police.

All the social control variables were significantly correlated with attitudes toward police except peer attachment. In this study, those more socially bonded hold more favorable attitudes toward police than those with weaker social bonds. It was interesting to discover that peer attachment was not significant in the study. It was hypothesized that peer attachment would be significant based on the logic college students would be more influenced by peers than parents, but that wasn't found to be true. Instead, parental attachment was a significant predictor suggesting that parental influence remains a strong motivator among college students.

> Hypothesis 1: Students who report higher approval ratings from their parents and peers for drug use and crime will report having less favorable attitudes toward police.

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Hypothesis 1a: Peers' reinforcement for both alcohol/drug use and crime will be more highly correlated with a participant's attitudes toward police when compared to parent reinforcement for both alcohol/drug use and crime.

Hypothesis 2: Students who hold favorable definitions toward alcohol/drug use will report less favorable attitudes toward the police.

The social learning variables were all significant predictors of variations in attitudes toward police except peer reinforcement for crime. These findings confirm Akers (1998) claim that negative reinforcement for behaviors, holding favorable attitudes for negative behaviors, and being associated with people who hold positive attitudes toward law violation increases the likelihood for crime. As predicted by SLT, the associations were negative meaning that attitudes toward police were less favorable. An interesting outcome was that peer reinforcement for crime was not a significant predictor but parental reinforcement for crime was. Attitudes favorable to drug use was the strongest predictor in the full model showing that individuals who have more favorable attitudes toward drug use hold less favorable attitudes toward police.

Hypothesis 4: Students who have had direct and/or vicarious negative contact with the police will hold less favorable attitudes toward police when compared to those who did not.

All but one contact variable was found to be significant in predicting college student attitudes toward police, which partially supports hypothesis 4. They were all negatively correlated except citizen-initiated contact with police. This suggests that people who contact the police are happier with them than people who are contacted by police or know people who were arrested or cited by police. This could be because people who contact the police are normally seeking their services and probably trust that the police will respond and help upon arrival.

Citizen-initiated contact is voluntary while police-initiated contact is generally involuntary and could be seen as at least being an inconvenience for the individual being contacted. It's interesting that vicarious experiences affected attitudes less than direct contact and were rendered not significant in the full model contradicting findings in prior research. Being arrested in the past year and police initiated contact were two of the strongest predictors in attitudes toward police. Not surprisingly, those who were arrested in the past year or were contacted by police also reported holding less favorable attitudes toward them.

Hypothesis 5: Contact variables will be more strongly correlated with attitudes toward the police than all other variables.

Social learning and social control variables explained more variance in attitudes toward police than contact variables. Furthermore, the social learning model was a stronger predictor than the social control model. The evidence does not support the claim in hypothesis 5.

However, some anomalies were discovered. First and foremost, participants were asked to rate their overall satisfaction with police. Fifty-one percent indicated being either "very satisfied" or "satisfied" while 49% indicated being "neutral", "dissatisfied" or "very dissatisfied". This satisfaction rating is much lower than prior literature where researchers found a large majority of respondents to be satisfied or very satisfied with the police (Schafer et al. 2003; Frank et al. 2005). This could be due to the fact that the college student population studied was comprised of individuals from a much younger demographic than a general population survey. The mean age of respondents was approximately 24 years old. Another finding that wasn't expected was that the parent variables in both the social learning and social control subsets were significantly correlated with the respondents attitudes toward police while peer

reinforcement of crime and peer attachment were shown to hold no significance. This shows that parent influence is a stronger predictor than peer influence within this sample and partially supports hypothesis 1 and refutes hypothesis 1a. This is contradictory to the idea that individuals in college are away from their parents and in a new environment where peers could impact their own attitudes more so than parents.

There were some limitations to the present study. The cross-sectional nature of the study did not allow for temporal priority between the predictor variables and contact with police. Did the attitude result from contacts with police or did the individual hold negative attitudes toward police prior to contact? Also, a random sample was not used to gather the data, and the findings cannot be generalized to other institutions across the nation. The internet based survey may not have reached all the possible students due to user error or the simple fact that students may not use their student generated email with all the other options available to them. Furthermore, while the questions asked in the survey data used in the analysis were based on prior research, some of these studies did not list the exact questions as part of the reporting of findings. Some of those studies may have used different questions and techniques to gather and analyze their data than those used in this study. This may limit the ability to compare the findings reported here with those of other research. These comparisons are most suitable when they are made with prior research that was based on samples from college student populations.

A more comprehensive study could help explain a greater level of variance within attitudes toward police. While the survey collected data about respondent's opinions of their community, data coding errors through the exportation of data from select survey to SPSS rendered some of the survey data unusable, which may bias the findings. Also asking questions pertaining to the respondent's satisfaction and opinion of their interaction with police could help

unfold the complex nature of attitude development stemming from experiences with police. A more robust analysis of SBT and SLT might yield information about the role of involvement and differential association not presented here.

The current study replicates and extends the prior research that has been published on theoretically based explanations of public attitudes toward police. Using a college student population and applying contact, demographic, social learning and social control variables provided a unique analysis on an understudied population. Both social bond and social learning explained more of the variance in attitudes toward police than the control and contact variables showing that theory based research must continue to be conducted in order to unravel this complex issue. Furthermore, social control and social learning models in combination with contact and demographic variables explained the highest level of variance in the dependent variable.

Student attitudes are shaped and molded by society, experiences and their own identities. This study shows that social learning, social bond, contact and demographic variables largely affect college student attitudes. It supports the need for further studies to incorporate theoretical models in this field of research. College students are in a critical stage of human development and often leave their institutions as much different persons compared to when they entered. These transitions are undoubtedly influenced by their relationships, experiences, and education. It is pertinent to examine this population in police research as they often become future policy makers and professionals charged with tackling tomorrow's challenges.

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Appendix I Descriptive Statistics

Variable	Mean	Std. Deviation	Min.	Max.	Alpha Score
Attitudes T. Police	51.70	12.20	2	75	0.955
Non_White	0.10	.30	0	1	
Female	.66	.47	0	1	
Class Standing	3.04	1.52	1	7	
Age	24.93	8.61	5	99	
Income	5.82	3.03	1	10	
Highest Ed. Completed by Parent	6.32	1.92	1	9	
Belief in Conventional Rules	13.01	4.06	1	33	0.742
Parental Attachment	21.74	3.55	4	25	0.87
College Attachment	19.92	3.31	4	25	0.727
Commitment to Activities	19.38	4.36	4	30	.775
Attitudes Favorable to Drug Use	27.02	8.54	2	40	.908
Friends Reinforce Drug Use	23.75	7.46	7	40	.923
Parents Reinforce Drug Use	16.57	5.74	1	40	.884
Parents Reinforce Crime	8.30	2.35	3	35	.828
Police Initiated Contact	.52	.50	0	1	
Citizen Initiated Contact	.34	.474	0	1	
Citation Received in Past Year	.22	.413	0	1	
Arrested Past Year	.16	.368	0	1	
Friends and Family Citation	.72	.449	0	1	
Friends and Family Arrest	.42	.494	0	1	

Appendix II. Variable Frequency Distributions

AttitudeTPolice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	.0	.1	.1
	4.00	1	.0	.1	.1
	13.00	1	.0	.1	.2
	14.00	2	.1	.1	.3
	15.00	9	.4	.5	.8
	16.00	7	.3	.4	1.1
	17.00	2	.1	.1	1.3
	18.00	1	.0	.1	1.3
	19.00	4	.2	.2	1.5
	20.00	7	.3	.4	1.9
	21.00	4	.2	.2	2.1
	22.00	5	.2	.3	2.4
	23.00	1	.0	.1	2.5
	24.00	4	.2	.2	2.7
	25.00	8	.4	.4	3.1
	26.00	9	.4	.5	3.6
	27.00	10	.5	.5	4.2
	28.00	10	.5	.5	4.7
	29.00	6	.3	.3	5.0
	30.00	16	.8	.9	5.9
	31.00	12	.6	.7	6.6
	32.00	12	.6	.7	7.2
	33.00	15	.7	.8	8.0
	34.00	14	.7	.8	8.8
	35.00	18	.9	1.0	9.8
	36.00	27	1.3	1.5	11.3
	37.00	23	1.1	1.3	12.5
	38.00	28	1.3	1.5	14.1
	39.00	29	1.4	1.6	15.7
	40.00	31	1.5	1.7	17.4
	41.00	25	1.2	1.4	18.7

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	42.00	31	1.5	1.7	20.4
	43.00	32	1.5	1.8	22.2
	44.00	49	2.3	2.7	24.8
	45.00	34	1.6	1.9	26.7
	46.00	49	2.3	2.7	29.4
	47.00	37	1.8	2.0	31.4
	48.00	49	2.3	2.7	34.1
	49.00	51	2.4	2.8	36.9
	50.00	69	3.3	3.8	40.7
	51.00	66	3.1	3.6	44.3
	52.00	60	2.8	3.3	47.6
	53.00	65	3.1	3.6	51.1
	54.00	71	3.4	3.9	55.0
	55.00	75	3.6	4.1	59.1
	56.00	73	3.5	4.0	63.1
	57.00	73	3.5	4.0	67.1
	58.00	69	3.3	3.8	70.9
	59.00	70	3.3	3.8	74.7
	60.00	82	3.9	4.5	79.2
	61.00	52	2.5	2.8	82.0
	62.00	41	1.9	2.2	84.3
	63.00	27	1.3	1.5	85.8
	64.00	29	1.4	1.6	87.4
	65.00	25	1.2	1.4	88.7
	66.00	27	1.3	1.5	90.2
	67.00	25	1.2	1.4	91.6
	68.00	10	.5	.5	92.1
	69.00	17	.8	.9	93.0
	70.00	23	1.1	1.3	94.3
	71.00	20	.9	1.1	95.4
	72.00	12	.6	.7	96.1
	73.00	13	.6	.7	96.8
	74.00	20	.9	1.1	97.9
	75.00	39	1.8	2.1	100.0
	Total	1827	86.6	100.0	
Missing	System	283	13.4		

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Total		2110	100.0		

Non_White

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1134	53.7	89.7	89.7
	1.00	130	6.2	10.3	100.0
	Total	1264	59.9	100.0	
Missing	System	846	40.1		
Total		2110	100.0		

Female

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	428	20.3	33.9	33.9
	1.00	836	39.6	66.1	100.0
	Total	1264	59.9	100.0	
Missing	System	846	40.1		
Total		2110	100.0		

Class Standing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	248	11.8	19.5	19.5
	2	263	12.5	20.6	40.1
	3	244	11.6	19.1	59.2
	4	331	15.7	26.0	85.2
	5	114	5.4	8.9	94.1
	6	43	2.0	3.4	97.5
	7	32	1.5	2.5	100.0
	Total	1275	60.4	100.0	
Missing	System	835	39.6		
Total		2110	100.0		

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	.0	.1	.1
	17	1	.0	.1	.2
	18	126	6.0	9.9	10.1
	19	167	7.9	13.1	23.2
	20	145	6.9	11.4	34.6
	21	159	7.5	12.5	47.2
	22	106	5.0	8.3	55.5
	23	79	3.7	6.2	61.7
	24	65	3.1	5.1	66.9
	25	54	2.6	4.3	71.1
	26	41	1.9	3.2	74.3
	27	36	1.7	2.8	77.2
	28	39	1.8	3.1	80.2
	29	35	1.7	2.8	83.0
	30	26	1.2	2.0	85.0
	31	14	.7	1.1	86.1
	32	13	.6	1.0	87.2
	33	15	.7	1.2	88.3
	34	14	.7	1.1	89.4
	35	10	.5	.8	90.2
	36	7	.3	.6	90.8
	37	5	.2	.4	91.2
	38	7	.3	.6	91.7
	39	8	.4	.6	92.4
	40	7	.3	.6	92.9
	41	8	.4	.6	93.5
	42	4	.2	.3	93.9
	43	3	.1	.2	94.1
	44	5	.2	.4	94.5
	45	4	.2	.3	94.8
	46	7	.3	.6	95.4

		Frequency	Percent	Valid Percent	Cumulative Percent
	47	5	.2	.4	95.7
	48	4	.2	.3	96.1
	49	7	.3	.6	96.6
	50	8	.4	.6	97.2
	51	7	.3	.6	97.8
	52	2	.1	.2	98.0
	53	3	.1	.2	98.2
	54	3	.1	.2	98.4
	55	3	.1	.2	98.7
	56	5	.2	.4	99.1
	57	2	.1	.2	99.2
	58	3	.1	.2	99.4
	60	1	.0	.1	99.5
	62	4	.2	.3	99.8
	68	1	.0	.1	99.9
	99	1	.0	.1	100.0
	Total	1270	60.2	100.0	
Missing	System	840	39.8		
Total		2110	100.0		

Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	74	3.5	6.0	6.0
	2	154	7.3	12.6	18.6
	3	135	6.4	11.0	29.7
	4	109	5.2	8.9	38.6
	5	124	5.9	10.1	48.7
	6	115	5.5	9.4	58.1
	7	93	4.4	7.6	65.7
	8	92	4.4	7.5	73.2
	9	77	3.6	6.3	79.5
	10	251	11.9	20.5	100.0
	Total	1224	58.0	100.0	
Missing	System	886	42.0		

		Frequency	Percent		
Total		2110	100.0		

Highest Education Completed by Parent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	.1	.2	.2
	2	20	.9	1.6	1.7
	3	167	7.9	13.2	14.9
	4	58	2.7	4.6	19.5
	5	165	7.8	13.0	32.5
	6	83	3.9	6.5	39.0
	7	399	18.9	31.5	70.5
	8	247	11.7	19.5	90.0
	9	127	6.0	10.0	100.0
	Total	1268	60.1	100.0	
Missing	System	842	39.9		
Total		2110	100.0		

BeliefConventionalAct

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	.0	.1	.1
	2.00	1	.0	.1	.1
	4.00	1	.0	.1	.2
	6.00	2	.1	.1	.4
	7.00	20	.9	1.4	1.8
	8.00	22	1.0	1.6	3.4
	9.00	239	11.3	17.3	20.7
	10.00	164	7.8	11.9	32.6
	11.00	153	7.3	11.1	43.6
	12.00	134	6.4	9.7	53.3
	13.00	133	6.3	9.6	63.0
	14.00	109	5.2	7.9	70.8
	15.00	89	4.2	6.4	77.3

		Frequency	Percent	Valid Percent	Cumulative Percent
	16.00	70	3.3	5.1	82.3
	17.00	57	2.7	4.1	86.5
	18.00	43	2.0	3.1	89.6
	19.00	35	1.7	2.5	92.1
	20.00	33	1.6	2.4	94.5
	21.00	26	1.2	1.9	96.4
	22.00	13	.6	.9	97.3
	23.00	8	.4	.6	97.9
	24.00	6	.3	.4	98.3
	25.00	6	.3	.4	98.8
	26.00	4	.2	.3	99.1
	27.00	4	.2	.3	99.3
	28.00	4	.2	.3	99.6
	29.00	2	.1	.1	99.8
	32.00	2	.1	.1	99.9
	33.00	1	.0	.1	100.0
	Total	1382	65.5	100.0	
Missing	System	728	34.5		
Total		2110	100.0		

ParentalAttachment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	8	.4	.6	.6
	6.00	3	.1	.2	.8
	7.00	1	.0	.1	.9
	8.00	3	.1	.2	1.1
	9.00	3	.1	.2	1.4
	10.00	10	.5	.8	2.1
	11.00	5	.2	.4	2.5
	12.00	5	.2	.4	2.9
	13.00	5	.2	.4	3.3
	14.00	10	.5	.8	4.0
	15.00	17	.8	1.3	5.3
	16.00	27	1.3	2.1	7.4

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		Frequency	Percent	Valid Percent	Cumulative Percent
	17.00	30	1.4	2.3	9.7
	18.00	42	2.0	3.2	12.9
	19.00	86	4.1	6.5	19.4
	20.00	124	5.9	9.4	28.8
	21.00	116	5.5	8.8	37.7
	22.00	124	5.9	9.4	47.1
	23.00	177	8.4	13.5	60.6
	24.00	213	10.1	16.2	76.8
	25.00	305	14.5	23.2	100.0
	Total	1314	62.3	100.0	
Missing	System	796	37.7		
Total		2110	100.0		

CollegeAttachment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	1	.0	.1	.1
	6.00	1	.0	.1	.2
	7.00	2	.1	.2	.3
	8.00	3	.1	.2	.5
	9.00	1	.0	.1	.6
	10.00	4	.2	.3	.9
	11.00	8	.4	.6	1.5
	12.00	14	.7	1.1	2.6
	13.00	21	1.0	1.6	4.2
	14.00	33	1.6	2.5	6.8
	15.00	28	1.3	2.2	8.9
	16.00	66	3.1	5.1	14.0
	17.00	87	4.1	6.7	20.7
	18.00	119	5.6	9.1	29.8
	19.00	141	6.7	10.8	40.6
	20.00	187	8.9	14.4	55.0
	21.00	149	7.1	11.4	66.4
	22.00	142	6.7	10.9	77.3
	23.00	107	5.1	8.2	85.6

		Frequency	Percent	Valid Percent	Cumulative Percent
	24.00	86	4.1	6.6	92.2
	25.00	102	4.8	7.8	100.0
	Total	1302	61.7	100.0	
Missing	System	808	38.3		
Total		2110	100.0		

CommitmentExtraCurric

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	2	.1	.2	.2
	6.00	3	.1	.2	.4
	7.00	4	.2	.3	.7
	8.00	5	.2	.4	1.1
	9.00	7	.3	.5	1.6
	10.00	11	.5	.9	2.5
	11.00	17	.8	1.3	3.8
	12.00	32	1.5	2.5	6.3
	13.00	34	1.6	2.6	8.9
	14.00	60	2.8	4.6	13.6
	15.00	60	2.8	4.6	18.2
	16.00	67	3.2	5.2	23.4
	17.00	101	4.8	7.8	31.2
	18.00	121	5.7	9.4	40.6
	19.00	117	5.5	9.1	49.7
	20.00	141	6.7	10.9	60.6
	21.00	118	5.6	9.1	69.7
	22.00	86	4.1	6.7	76.4
	23.00	90	4.3	7.0	83.3
	24.00	67	3.2	5.2	88.5
	25.00	47	2.2	3.6	92.2
	26.00	38	1.8	2.9	95.1
	27.00	26	1.2	2.0	97.1
	28.00	14	.7	1.1	98.2
	29.00	8	.4	.6	98.8
	30.00	15	.7	1.2	100.0

		Frequency	Percent	Valid Percent	Cumulative Percent
	Total	1291	61.2	100.0	
Missing	System	819	38.8		
Total		2110	100.0		

ATFAVORDRUGUSE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	.0	.1	.1
	5.00	1	.0	.1	.1
	7.00	1	.0	.1	.2
	8.00	19	.9	1.3	1.5
	9.00	9	.4	.6	2.1
	10.00	17	.8	1.1	3.2
	11.00	12	.6	.8	4.0
	12.00	25	1.2	1.7	5.7
	13.00	29	1.4	2.0	7.7
	14.00	25	1.2	1.7	9.4
	15.00	35	1.7	2.4	11.7
	16.00	34	1.6	2.3	14.0
	17.00	44	2.1	3.0	17.0
	18.00	37	1.8	2.5	19.4
	19.00	37	1.8	2.5	21.9
	20.00	46	2.2	3.1	25.0
	21.00	47	2.2	3.2	28.2
	22.00	48	2.3	3.2	31.4
	23.00	46	2.2	3.1	34.5
	24.00	48	2.3	3.2	37.8
	25.00	46	2.2	3.1	40.8
	26.00	53	2.5	3.6	44.4
	27.00	58	2.7	3.9	48.3
	28.00	51	2.4	3.4	51.7
	29.00	59	2.8	4.0	55.7
	30.00	60	2.8	4.0	59.8
	31.00	60	2.8	4.0	63.8
	32.00	65	3.1	4.4	68.2

		Frequency	Percent	Valid Percent	Cumulative Percent
	33.00	53	2.5	3.6	71.7
	34.00	68	3.2	4.6	76.3
	35.00	61	2.9	4.1	80.4
	36.00	65	3.1	4.4	84.8
	37.00	48	2.3	3.2	88.0
	38.00	70	3.3	4.7	92.7
	39.00	51	2.4	3.4	96.2
	40.00	57	2.7	3.8	100.0
	Total	1486	70.4	100.0	
Missing	System	624	29.6		
Total		2110	100.0		

FriendsREINFOdruguse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.00	2	.1	.1	.1
	8.00	24	1.1	1.6	1.8
	9.00	11	.5	.8	2.5
	10.00	28	1.3	1.9	4.5
	11.00	18	.9	1.2	5.7
	12.00	29	1.4	2.0	7.7
	13.00	33	1.6	2.3	9.9
	14.00	31	1.5	2.1	12.1
	15.00	33	1.6	2.3	14.3
	16.00	57	2.7	3.9	18.2
	17.00	50	2.4	3.4	21.7
	18.00	59	2.8	4.0	25.7
	19.00	41	1.9	2.8	28.5
	20.00	65	3.1	4.5	33.0
	21.00	64	3.0	4.4	37.4
	22.00	72	3.4	4.9	42.3
	23.00	80	3.8	5.5	47.8
	24.00	130	6.2	8.9	56.7
	25.00	52	2.5	3.6	60.3
	26.00	40	1.9	2.7	63.0

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		Frequency	Percent	Valid Percent	Cumulative Percent
	27.00	70	3.3	4.8	67.8
	28.00	64	3.0	4.4	72.2
	29.00	67	3.2	4.6	76.8
	30.00	55	2.6	3.8	80.6
	31.00	41	1.9	2.8	83.4
	32.00	62	2.9	4.3	87.7
	33.00	28	1.3	1.9	89.6
	34.00	29	1.4	2.0	91.6
	35.00	40	1.9	2.7	94.3
	36.00	21	1.0	1.4	95.7
	37.00	8	.4	.5	96.3
	38.00	16	.8	1.1	97.4
	39.00	15	.7	1.0	98.4
	40.00	23	1.1	1.6	100.0
	Total	1458	69.1	100.0	
Missing	System	652	30.9		
Total		2110	100.0		

ParentsREINFdrugeuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	.0	.1	.1
	4.00	1	.0	.1	.1
	6.00	2	.1	.1	.3
	7.00	5	.2	.3	.6
	8.00	96	4.5	6.7	7.3
	9.00	33	1.6	2.3	9.6
	10.00	75	3.6	5.2	14.8
	11.00	95	4.5	6.6	21.3
	12.00	95	4.5	6.6	27.9
	13.00	101	4.8	7.0	34.9
	14.00	78	3.7	5.4	40.3
	15.00	78	3.7	5.4	45.7
	16.00	101	4.8	7.0	52.7
	17.00	85	4.0	5.9	58.6

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		Frequency	Percent	Valid Percent	Cumulative Percent
	18.00	84	4.0	5.8	64.4
	19.00	84	4.0	5.8	70.3
	20.00	77	3.6	5.3	75.6
	21.00	62	2.9	4.3	79.9
	22.00	63	3.0	4.4	84.3
	23.00	51	2.4	3.5	87.8
	24.00	49	2.3	3.4	91.2
	25.00	41	1.9	2.8	94.0
	26.00	18	.9	1.2	95.3
	27.00	20	.9	1.4	96.7
	28.00	10	.5	.7	97.4
	29.00	9	.4	.6	98.0
	30.00	5	.2	.3	98.3
	31.00	5	.2	.3	98.7
	32.00	7	.3	.5	99.2
	33.00	3	.1	.2	99.4
	34.00	2	.1	.1	99.5
	35.00	1	.0	.1	99.6
	37.00	1	.0	.1	99.7
	39.00	1	.0	.1	99.7
	40.00	4	.2	.3	100.0
	Total	1443	68.4	100.0	
Missing	System	667	31.6		
Total		2110	100.0		

ParentsREINcrime

		Frequency	Percent	Valid Percent	Cumulative Percent
	3.00	1	.0	.1	.1
	6.00	12	.6	.9	1.0
	7.00	766	36.3	57.1	58.1
Valid	8.00	182	8.6	13.6	71.7
	9.00	116	5.5	8.7	80.3
	10.00	74	3.5	5.5	85.8
	11.00	67	3.2	5.0	90.8

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		Frequency	Percent	Valid Percent	Cumulative Percent
	12.00	37	1.8	2.8	93.6
	13.00	31	1.5	2.3	95.9
	14.00	33	1.6	2.5	98.4
	15.00	9	.4	.7	99.0
	16.00	3	.1	.2	99.3
	17.00	4	.2	.3	99.6
	18.00	1	.0	.1	99.6
	21.00	1	.0	.1	99.7
	26.00	1	.0	.1	99.8
	27.00	1	.0	.1	99.9
	30.00	1	.0	.1	99.9
	35.00	1	.0	.1	100.0
	Total	1341	63.6	100.0	
Missing	System	769	36.4		
Total		2110	100.0		

PoliceInitiatedContact

		Frequency	Percent	Valid Percent	Cumulative Percent
	0	773	36.6	47.8	47.8
Valid	1	845	40.0	52.2	100.0
	Total	1618	76.7	100.0	
Missing	System	492	23.3		
Total		2110	100.0		

CitizenInitiatedContact

		Frequency	Percent	Valid Percent	Cumulative Percent
	0	1050	49.8	66.0	66.0
Valid	1	542	25.7	34.0	100.0
	Total	1592	75.5	100.0	
Missing	System	518	24.5		
Total		2110	100.0		

CitationPastYearRecieved

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1242	58.9	78.3	78.3
	1	345	16.4	21.7	100.0
	Total	1587	75.2	100.0	
Missing	System	523	24.8		
Total		2110	100.0		

ArrestedPastYear

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1317	62.4	83.9	83.9
	1	253	12.0	16.1	100.0
	Total	1570	74.4	100.0	
Missing	System	540	25.6		
Total		2110	100.0		

FriendsFAMCitations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	435	20.6	27.9	27.9
	1	1125	53.3	72.1	100.0
	Total	1560	73.9	100.0	
Missing	System	550	26.1		
Total		2110	100.0		

FriendsFAMArrest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	886	42.0	57.6	57.6
	1	652	30.9	42.4	100.0

	Total	1538	72.9	100.0	
Missing	System	572	27.1		
Total		2110	100.0		