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Examining Perceptions of Crime and Disorder in A Rural University Setting

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EXAMINING PERCEPTIONS OF CRIME AND DISORDER IN A RURAL UNIVERSITY SETTING

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by

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ABSTRACT

EVALUATING PERCEPTIONS OF CRIME AND DISORDER

IN A RURAL UNIVERSITY SETTING

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The present study responds to the gap in our understanding of perceptions of crime and disorder in younger age groups, and in a rural setting. A survey was administered to collected students' perception of crime and disorder on campus, of those surveys 655 students responded. A factor analysis using a varimax rotation was used to group similar variables into latent variables. Three factors emerged: (1) general perception of crime and disorder, (2) traffic congestion, and (3) alcohol and drug abuse. Various analytical techniques were also used, such as OLS (ordinary least squares) regression, difference of means, and analysis of variance (ANOVA). Findings in this study suggest that gender plays the largest role. In particular, gender was a significant predictor in Alcohol and Drug Disorder, and in perceptions of Traffic Disorder models. However, it did not have an impact in explaining students' perception of crime and disorder in the General Crime Model. Students who lived on campus perceived greater levels of drug and alcohol on campus when compared to students who live off campus. Moreover, a key finding in this research is students' perceptions of the CWU Police Effectiveness factor, it played a role in the General Crime Model. Students' perceptions of general crime on campus, which includes; People harassing or intimidating others, litter and trash, vandalism, theft, assault, robbery, intimate partner violence, and stalking was mediated by their perceptions of CWU police effectiveness.

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

LIST OF TABLES

CHAPTER I: INTRODUCTION

Research on perceptions of crime and disorder has not focused on younger age groups. The majority of research has focused on adults living in urban settings. This present study responds to the gap in our understanding of perceptions of crime and disorder in younger age groups in a rural university setting. Under these conditions, campus officers play a key role in creating an atmosphere of trust, respect, and safe havens (Wilson & Wilson, 2011).

Evaluating perceptions of crime and disorder in a rural university setting study provides us with the opportunity to examine how social cohesion, legitimacy, prior contact with campus police, and demographic factors effect students' perception of crime and disorder on campus. Historically, when analyzing perceptions of crime and disorder, academics have incorporated various factors that shape perceptions, such as neighborhoods structural deficiencies, and individual demographics. However, other factors, such as perceptions of crime and disorder may also be related to perceptions of police effectiveness. For instance, analyzing how students perceive the performance of the general police, and their perceptions of how campus police solve problems and control crime on campus.

Campus policing is different from traditional policing mainly because the population being served is unique, consisting of young adults experiencing a transition in their life. College is the first time away from home and it is also the first time young adults establish their own identity and independence. This transitional period in their lives makes them a unique demographic (Jacobsen, 2011). Researchers have concluded that crime and violence are prevalent in campus communities. According to Chekwa, Thomas, and Jones (2013), some students may be concerned about their safety while on campus in the highlight of mass shootings on school grounds (Chekwa, Thomas & Jones, 2013). Nowadays, campus law enforcement has

evolved into sophisticated agencies with trained officers. At first glance, it may seem that campus police, and traditional police officers have similar organizational and operational styles. However, campus police officer must perform in accordance with the expectations of the college or university (Allen, 2015; Alpert & Dunham, 2015).

CHAPTER II: LITERATURE REVIEW

Broken Windows Thesis

Wilson and Kelling (1982) advanced the idea that social and physical disorder influence the perceptions of crime. They argued that disorder is not directly linked to crime. Instead, physical signs of disorder lead to fear. This fear eventually dismantles community cohesion and action, causing crime and disorder to increase. Hunter (1978) also supported the idea that signs of social disorder serve as important predictors of perceived fears than actual crime itself.

Moreover, the Broken Windows metaphor was inspired by an experiment by Philip Zimbardo (1973), which analyzed the process of vandalization. The researchers abandoned a car inside Bronx, New York and Palo Alto, California. They observed how quickly people in the community noticed and interacted with the abandoned property. The experiment suggested that minor disorder and incivilities would lead to more serious crime. At the community level, abandoned property, untended weeds, and smashed windows signals that no one cares. The untended property then becomes a fair game for people to engage in destructive behavior, even for those who consider themselves law abiding citizens (Wilson & Kelling, 1982).

Support for Broken Windows Theory

Since Broken Windows was introduced, many police officers adopted new policing approaches (Skogan, 2008). The Chicago police, for example, organized neighborhood cleanups, took note of burned out streets lights, and untrimmed trees (Skogan, 2008). Officers in Chicago also asked stores to refrain from giving money to panhandlers. The "positive loitering" initiative had a positive result on residents who wanted to regain back their streets: "These campaigns are efforts to increase the frequency in which law-abiding residents occupy spaces to discourage street prostitutes, loiters, drinkers, and nascent drug markets" (Skogan, 2008, p.405). Therefore,

when community members and police officers work together, it facilitates the mobilization of safety initiatives, order maintenance, and crime control.

The idea of Broken Windows Theory has been interpreted differently in other theoretical contexts, such as public health. Cohen, Spear, Scribner, Kissinger, Mason, and Wildgen (2000) examined the possible relationship of neighborhood conditions with high-risk sexual behavior. Fifty-five block groups were examined by rating houses and street conditions. A "Broken Windows" index was used to measure physical disorder. Scholars also used data from the 1990 and 1995 census to determine the association between "Broken Windows" demographic characteristics and gonorrhea rates. The findings indicated that high-poverty neighborhoods block groups with more signs of physical and social disorder had higher rates of gonorrhea, compared to block groups with lower levels of broken windows scores. The theoretical basis is that physical disorder signals that no cares, while also diminishing traditional moral standards.

Gau, Corsaro, and Brunson (2014), examined the disorder-fear relationship as proposed by the Broken Windows Theory. The rationale is that "disorder causes a breakdown in people's beliefs about their neighbors' values and willingness to exercise control over area via calling for police services, which is what causes people to feel fearful" (p.585). The focus of the Gau and associates (2014) study was to examine to what extent social factors mediate the fear of crime. Researchers measured how fearful respondents were of possible victimization. Scholars asked respondents to report how much of a problem were the following; people making drug sales, people using drugs in public, people drinking in public, people making noise at night, and people loitering or hanging out. Other measurements included social cohesion and social control questions.

The results partially supported the Broken Windows Theory, "in that disorder may inspire fear partially as a result of its detrimental impact on neighborhood cohesion and shared expectations for social control" (Gau et al., 2014, p.579). Specifically, the analysis found that those who perceived greater disorder were significantly more fearful. Approximately 79% of the disorder impact of fear was direct, while the remaining 21% operated through disorder's corrosive effect on shared expectations for social control. Social control had a higher relationship in the disorder-fear relationship than social cohesion. This supports the Broken Windows hypothesis, when disorder is conceptualized in terms that no cares to intervene in an unpleasant setting and condition (Gau et al., 2014; Wilson & Kelling, 1982).

Implications of Broken Windows Theory

Sheldon (2004) argues that the Broken Windows Theory lacks a theoretical basis status. Another important question is how disorder defined? Sheldon (2004) suggests there is a class bias operating, such as white collar and corporate crime. As disorderly behavior in inner cities leads to more serious crime, but not similar behaviors elsewhere. Similarly, Thompson (2015) discusses that in America the wealthy appear to be viewed as a separate race, while some criminal "disorder" is a function of poverty itself.

Some studies examine perceptions of disorder by collecting information from residents, and others rely on systematic observations (Yang & Pao, 2015; Hinkle & Yang, 2013). This creates complications since systematic social observations and resident reports may not necessarily mean the same thing (Yang & Pao, 2015).

Yang and Pao (2015) used laboratory experimental methods to collect information from 361 respondents. In their study, respondents were asked to decide whether each photo presented to them was consisted with how disorder was defined in the Broken Windows Theory. As

described in Wilson and Kelling (1982) article, each photo was edited to combine a pre-rated physical background and social actors. The findings partially supported the Broken Windows Theory. In the study, scholars presented photos containing different social and physical settings to test an individual's judgment. The analysis indicated that the signs of disorder such as trash, and graffiti increased respondents' perception of disorder. Moreover, when race and dress style were presented in the images, respondents had a significant impact on how they perceived social and physical environments. Specifically, "racial appearance and dress style, had a significant impact on how respondents perceived environment depicted in the photographs" (p.556). Researchers also found that the presence of social actors, regardless of their race of social class, led to higher ratings of disorderliness when compared to the control group.

When respondents viewed photos without social actors their responses were consistent. However, when both social actors and physical elements were introduced in the photos, the agreement of respondents declined. In other words, residents perceive higher levels of social disorder and fear in the view of physical signs of disorder, and individuals of a particular race and dress style. Therefore, their finding suggest that a disorderly environment does not mean or signify that residents feel the same way (Yang & Pao, 2015).

If social actors play a role in shaping perceptions of crime and disorder, certain strategies may not have the desired outcomes when people draw conclusions or assumptions of disorderliness based on individual appearance. Racial appearance and dress style was used to test whether individuals would perceive more physical disorder.

Previous Research on Perception of Crime and Disorder

Individual level

Studies have emphasized that when individual-level factors are added (such as previous victimization, gender, race, income, health, length of stay, and education), the perception of crime varies across neighborhoods. Each community has unique factors that can mediate individual perception of crime and disorder (Hicks & Brown, 2013; Brunton-Smith & Sturgis, 2011; Gainey, Alper & Chappell, 2010). Within the literature of perception of crime and disorder, research indicates that perception is affected by variables on individual, community and contextual levels (Hicks & Brown, 2013; Franzini, Caughy, Nettles, & O'Campo, 2008; Sampson & Raudenbush, 2004).

Perceptions play a dominant role in influencing how individuals view the world around them (Hinkle & Yang, 2013). Hinkle and Yang (2015), found that there are different variables that affect how people perceived safety, when compared to perceptions of disorder. Subjects who perceive higher levels of social disorder are more likely to feel unsafe.

When looking at other variables, Hinkle and Yang (2015) found that females, older respondents, and those who had previously been victimized were more likely to report feeling unsafe. Their findings suggest that social disorder is not based on observable levels of social problems; instead, they are based on individual characteristics, the physical conditions of the environment, their perception of victimization risk, and racial composition. Given the findings, it is evident that differences in the levels of perceived fear of crime and disorder depend on different characteristics of individuals, and on the neighborhood social structure (Sampson & Raudenbush, 2004; Franzini et al., 2008).

Gender

The relationship between perceived fear of crime and gender has been investigated by many researchers. In general, scholars have found that women perceive higher levels of crime and disorder than men (Franklin & Franklin, 2009; Gainey et al., 2011; Franzini et al., 2008). Gainey, Alper, and Chappell (2011), point out that the effect of gender is explained by perceived risk, and not the actual perception of disorder or the trust in one's neighbor. On the other hand, Brunton-Smith and Sturgis (2011), found that women perceived more crime in neighborhoods that contain more visible signs of disorder, were socioeconomically disadvantaged, and had larger populations of youth.

Race

Demographics are also relevant roles that may influence our perception of crime and disorder of an unknown environment (Yang & Pao, 2015). When people encounter unfamiliar situations or strangers, "we tend to draw from stereotypes we learned from society to help us 'classify' situations into appropriate categories" (p.539).

Brunton-Smith and Sturgis (2011) found that women in neighborhoods that contain more visible signs of disorder, as well as neighborhoods that were identified as socioeconomically disadvantaged and with a larger population of young people, perceived more fear of crime.

The results revealed that both race and class composition were significant predictors of perceived disorder. This research is key to public policy. If perceived disorder is influenced by racial and class composition, then attempts to reduce physical disorder in neighborhoods might not work to reduce perceived disorder (Franzini et al., 2008). In fact, "an entirely different set of societal changes will need to be considered to address the more fundamental problem of racial stigma and poverty" (p.84).

Yang and Pao (2015) found that pictures of places with lower-class minority groups were more likely to be viewed as disorderly. They this may be due to "shared perceptions" that some individuals possess about minorities. These false ideologies lead to distorted perceptions about individuals. Previous research has found that race plays a large role in shaping perceptions of crime and disorder, but this was not found in Hinkle and Yang's (2014) study. In Hinkle and Yang (2014) investigation, the race of the individual respondents did not have any significant impact on perceptions of crime and disorder. However, race did play a role in perceptions of safety. Blacks were more likely to report feeling unsafe, and living on a street with higher percentage of Blacks reduced their perceptions of feeling unsafe. "Thus, even though racial groups may report similar levels of disorder, there may be differences across race in personal feelings in response to living in equally disorderly environments base on the current results" (p.32).

Mixed findings were also found in Brunton-Smith's (2011) study. Scholars used a nationally representative panel study from England and Wales, where they found that non-whites were identified as significantly more fear inducing than White respondents. Although, there were no "equivalent differences" in their levels of perceived disorder.

Education

Research on perceived disorder has mixed findings when it comes respondents' level of education. In Franzini and associates' (2008) study, after controlling for neighborhood condition, those with more education and those who moved to different neighborhoods more often perceived less disorder. Radcliffe, Groff, Sorg, and Haberman (2015), found that people who were older, and people who had more than a high school education perceived less violent crime overall. However, Hipp's (2010) analysis indicated that individuals with higher levels of

education perceived more crime, social disorder, and physical disorder when compared to people who had lower education. Specifically, "an increase in 3 years of education increased perceiving social and physical and crime approximately .06 SD of within-household cluster variability" (p.493).

Gainey et al., (2011) also found that individuals with higher education perceived higher levels of crime. This could indicate that those with higher levels of education may afford to live in wealthier neighborhoods where they perceive less crime and disorder. In these neighborhoods individuals may have higher levels of social cohesion, and a higher sense of belonging. A place they call home, and not just simply a place where they live. In contrast, those who cannot afford to live in wealthier places may view more physical and social cues of disorder, ultimately shaping their perceptions of crime and disorder. It is often confirmed that neighborhood poverty is a predictor of perceived disorder (Franzini et al., 2008; Sampson & Raudenbush, 2004).

Community

Recent studies have found that perceived crime rates and incivilities are connected to higher levels of fear when controlling for neighborhood characteristics. Brunton-Smith and Sturgis (2011), argued that "neighborhood ethnic diversity moderates difference in fear of crime between ethnic groups" (p.357). Data supported their argument, showing that whites are more fearful living in diverse neighborhood, but white people living in a less diverse neighborhood perceive less crime (Brunton-Smith & Sturgis). In addition, research on perception of crime and disorder finds that whites perceive more crime and disorder than Latinos and African Americans living in the same neighborhood (Hip, 2010; Gainey et al., 2011).

Understanding various aspects of neighborhoods is key to our understanding of how perceptions of crime and disorder are formed (Sampson & Raudenbush, 2004). To capture

individuals' perception of crime and disorder, various methods of obtaining data (surveys, systematic social observations, census data, and police data) were used to investigate individual and neighborhood perceptions of crime and disorder (Franzini, Caughy, Nettles, & O'Campo, 2008). Scholars found that residents' perceptions of disorder in their neighborhood are shaped by observable cues of physical disorder, social disorder, and neighborhood structure. They argue that, "poverty is the driving structural characteristics in perceiving disorder and that poverty is more influential than racial segregation in shaping perception of disorder" (p.91). Likewise, Sampson and Raudenbush (2004), found that a neighborhood's social and ethnic composition is highly related to perceptions of disorder. They found that poverty in neighborhoods was a strong predictor of perceived levels of disorder.

Consistent with the body of research pertaining to physical disorder within a neighborhood, residents who see higher levels of disorder report higher levels of perceived fear (Brunton-Smith & Sturgis, 2011). Franzini et al., (2008) found measures of observed physical and social disorder are associated with perceived disorder. Similarly, in Yang and Pao's (2015) laboratory experiments, scholars assembled pictures to examine how students and police officers would perceive disorder. When physical disorder was shown in photos (without social actors), respondents "were most certain in assigning the disorder label to the scenario" (p.545). However, when social actors appeared in the scenario, respondents were hesitant on their decisions.

Broken Windows Theory was supported in Yang and Pao's (2015) study. The ratings of both students and police officers on perceived disorder demonstrated high agreement. Brunton-Smith and Sturgis (2011) found that recorded crime rates, observable signs of crime and disorder, and the social structure characteristics of the neighborhood are all strong predictors for fear of crime (Brunton-Smith & Sturgis, 2011). The study also indicated that neighborhoods with

weak social controls, and organization structure were predictors of higher levels of perceived fear of crime. In particular, neighborhoods that were ethnically diverse, socioeconomically disadvantaged, and urban neighborhoods perceived higher levels of crime and disorder (Brunton-Smith & Sturgis, 2011).

Social Cohesion

Recently, there has been a growing interest in research that incorporates the impact of a community's social cohesion, and ethnic composition when examining perceptions of disorder. Despite vast amount of research on social cohesion (See Uchida et al., 2013, & Sampson et al., 1997), the term is still ambiguous. Chan, Pong To, and Chan (2006), suggest that cohesion should follow three criterias: (1) trust, help, cooperation; (2) common identity or sense of belonging, and (3) the subject's feelings. In Markowitz, Bellair, Liska, and Liu's (2001) cross-sectional study, scholars found that neighborhoods with higher levels of ethnic heterogeneity located in inner cities have less cohesion than those who have a median income, and residential stability.

Another definition, is provided by Uchida et al., (2013), who defined social cohesion as an emotional and social investment in one's neighborhood, and this feeling is shared among neighbors. Individuals in a neighborhood interact and form social ties or acquaintances, which eventually forms stronger ties. These social and emotional connections develop a sense of community and belonging that are shared equally among residents, but when these bonds are missing in a neighborhood, some individuals withdraw or disengage. This type of ideology can influence how individuals perceive crime and disorder. This is closely related to Wilson and Kelling's (1982) Broken Windows Theory; the neighborhood is not seen as home, instead it is

viewed as the place where they live with little or no emotional attachment to the home and the neighborhood in general.

Collective Efficacy

There are numerous ways social cohesion influences connections between individuals. One influence is how community members control and maintain order. This is often defined as collective efficacy. Collective efficacy emerged from the social disorganization body of research, and it is defined as the capacity of the community members, organization and other social groups to intervene informally and reduce crime (Uchida et al., 2013; Sampson et al., 1997). Uchida and associates (2013) defined social cohesion as the ability to produce a "social action to meet common goals and preserve shared values" (p.2).

Sampson, Raudenbush, and Earls (1997), explained that individual and neighborhood efficacy are both activated to achieve, "the linkage of mutual trust and the willingness to intervene for the common good that defines the neighborhood collective efficacy" (p.919). For example, at the neighborhood-level collective efficacy depends on community members' mutual trust and willingness to intervene. By contrast, when rules in a community are unclear, and mistrust or fear exists, individuals are less likely to intervene. Moreover, Sampson, et al., (1997) measured "informal social control," by asking residents how willing they would be to intervene in the following scenarios: children skipping school, spray painting, or disrespecting an adult. Social cohesion was measured by asking respondents how willing they were to help their neighbor, how close-knit the neighborhood is, if they trust people, if people in the neighborhood do not get along, and if they lacked shared values.

Findings suggested that neighborhoods with higher levels of collective cohesion perceived and experienced lower levels of physical and social disorder. Additionally, there was a greater likelihood that residents would intervene when problems emerged (Uchida et al., 2013; Sampson et al., 1997). Sampson and associates (1997), have contributed greatly to the

understanding of collective efficacy, but the measures they used in their study have not been sufficiently examined (Uchida et al., 2013). Hipp and Wo (2015) argued that even though Sampson et al., (1997) defined collective efficacy as both cohesion and trust, there has been a long-standing debate about them being two separate constructs that should be measured separately. Scholars also struggled with measuring informal social control in neighborhoods. Not only is it a methodological challenge for measurement, but a theoretical challenge as well.

Police Legitimacy

Today, police officers are the most visual forms of formal social control across the United States. Understanding how the public views law enforcement can provide us with key information that can help us evaluate policing policies, practices, and legitimacy (Tyler, 2011). The public perception becomes a key element to judging the police, which ultimately contributes to the public's willingness to recognize law enforcement as legitimate authority (Department of Justice, 2016).

Generally, legitimacy can be described as an "authority or institution that lead people to feel that that authority or institution is entitled to be deferred to an obeyed" (Sunshine & Tyler, 2003, p.514). According to the Police Executive Form (2014), in order for a community to have social cohesion and trust, depends on police legitimacy and procedural justice. Therefore, a suggestion for police officers is to increase their level of perceived legitimacy by explaining their actions to "people who are directly involved in those actions." Hence, this strategy could increase the sense that police are acting legitimately, instead of ruining the department's reputation.

Legitimacy is typically assessed by studying everyday interactions at the community level or by studying how people perceive law enforcement regardless of personal encounters. An

approach that is often used when conducting national surveys is asking people to express their confidence in police officers, and their opinion on the obligation to obey the law. For instance, police legitimacy is measured by asking how much they agree with the following statements: "The police are generally honest"; "I respect the police"; and "I feel proud of the police" (Tyler, 2004, p.88).

Legitimacy is often analyzed by measuring how individuals perceive law enforcement in everyday interactions. However, other scholars focus on specific elements that represent legitimacy. For example, Mazerolle, Antrobus, Bennett, and Tyler (2013), pointed out that elements of legitimacy include the "obligation to obey," "engagement," "commitment" or "disengagement." Equally important, Braithwaite, Murphy, and Reinhart (2007), described these elements as motivational postures that define how individuals present themselves towards authorities (Mazerolle et al., 2013, p.44; Braithwaite, Murphy & Reinhart, 2007). Suitably, these elements represent the building blocks for legitimacy perceptions. Although, a fundamental key is to measure whether people view police officers as legitimate authorities that are entitled to be obeyed (Tyler, 2004).

Mazerolle et al., (2013) examined the relationship between procedural justice and citizens' perceptions of police. They focus on whether "police can enhance perceptions legitimacy during short, police-initiated and procedurally just traffic encounter and how this single encounter shapes general views of police" (p.34). The survey included elements related to perceptions of police and procedural justice, such as legitimacy, trust, and cooperation with police in general. The analysis revealed that individuals who perceived officers as legitimate are more likely to cooperate with the police, and shorter encounters are considered "procedurally just," leading people to perceive higher levels of legitimacy. The analysis also suggested that

higher levels of police satisfaction did not make any difference in the willingness to cooperate with police officers (Mazerolle et al., 2013).

In Sunshine and Tyler's (2003) study, scholars used three evaluations to build their models to determine legitimacy: The ability for police officers to catch rule-breakers, performance when crime fighting, and the fairness of their distribution outcomes. Their results revealed that older, better educated, and female respondents were more likely to respond and cooperate with the law.

Research consistently demonstrates the public is divided over their perceptions towards law enforcement. Minorities are more likely to view law enforcement with suspicion, distrust, and lower levels of confidence when compared to white individuals (Sunshine & Tyler, 2003; Tyler, 2011, U.S. Department of Justice, 2016). African Americans' perception of racial discrimination in criminal law enforcement has been consistently identified in empirical research and opinion polls (Brooks, 2000). Brooks (2000) explains that African Americans suffer from a "dual frustration"; they perceive crime as a serious problem, as well as police brutality and harassment. Tyler and Wakslack (2004), claimed that when people feel they are being profiled, the authority of law enforcement is weakened and their performance is undermined.

Police-Community Relations

Police officers are often described as the gatekeepers of the criminal justice process (Siegel, 2000). They are the first formal element of the criminal justice system to have contact with citizens, and their decisions will dictate the future involvement of citizens in the criminal justice system. Since police have a tremendous amount of authority and discretion, there has been a growing interest in police effectiveness in reducing crime, disorder, and fear as specific police strategies and practices (Williams, 2011; Weisburd & Eck, 2004).

To measure individual's perception of police effectiveness, performance measures should incorporate success in building lasting community relations, preventing crime and disorder, and solving community problems. Maguire (2003) explained that performances measures of law enforcement "needs to account for a broader spectrum of the work that police do, not just that part of their work related to issuing citations and arresting offenders" (para. 14).

Police work involves a broad array of activities. When measuring police performance, researchers must ask the public how effectively police are doing their job. Police are servants of the people, and the public's responses should reflect that in their opinions towards police performance. If the public does not reflect that in their answers, then there must be some changes in how police go about doing their work. Maslov (2016) states that respondents' answers could reflect larger issues, "that may only indirectly relate to police efforts such as social disorder in their neighborhoods or their general fear of crime" (p.18). Thus, measuring police work broadly may help us find the information that is necessary to make changes or adjustments in police work.

Today, the strongest empirical support for perceptions of police effectiveness is found for police practices of hot spots, and community policing (Weisburd & Eck, 2004). Evidence has demonstrated that community policing lowers perceptions of crime and disorder. Giving citizens a sense that police will effectively combat crime.

Researchers found that community policing appears to reduce crime, disorder, and perceived fear of crime. However, it remains unclear whether these policing strategies are effective since various tactics used cannot be directly evaluated. On the other hand, problem-oriented policing has had a significant amount of research validating it as an effective policing approach.

Similarly, Weisburd and Eck (2004) could not find "consistent research agenda that would allow us to assess with strong confidence the effectiveness of community policing" (p.59). In fact, many of the core practices used in policing remain uncertain. Although, when community policing is combined with problem-oriented policing, citizens perceive less crime and disorder while actual crime and disorder is not impacted.

Attitude Towards Law Enforcement

The assessment of citizens' attitudes has become of significant importance (Shuck & Rosebaum, 2005; Hurst & Frank, 2000). Police misconduct and discriminatory practices by police have been frequently reported by the media (Shuck & Rosebaum, 2005). However, research has given little importance to the attitudes of juveniles towards the police; most of the research has focused on assessing attitudes of adults towards law enforcement (Hurst & Frank, 2000).

Youth Attitudes Towards Police

Hurst and Frank's (2000) measured juvenile attitudes towards police by using the following the four global attitude measures: (1) In general, I trust the police; (2) In general, I am satisfied with the police in my neighborhood; (3) In general, police officers do a good job; and (4) In general, I like the police. Other statements are used to create specific measures such as "the police do a good job of stopping people from using drugs" or "the police do a great job in

stopping crime." Their findings revealed that only 40 percent of responses to the general attitude items were favorable attitudes. The highest most favorable specific police functions were police officer keeping their neighborhoods quiet at night, (42.1%), police helping when your car is broken down (49.4%), and police aiding a sick person in need of help (52.4%). Although, findings suggested that overall attitudes of juveniles towards the police were not as favorable when compared to adults. Similarly, Hurst (2007) examined rural youth attitudes towards the police. Generally, findings suggested that juveniles have less positive attitudes towards police than adults. White teenagers reported 57% trust in the police, while 30% of non-white teens reported trust in the police. Generally, white teenagers were more positive about their police when compared to non-whites.

Race and Attitudes Towards Police

Racial and ethnic factors may shape and affect the community's attitude towards police. Research has shown that blacks are more likely to have unfavorable opinions about the police and the criminal justice system in general (Weitzer & Tuch, 1999). In fact, "survey research has shown that race is one of the strongest predictors of attitudes towards the police" (p.494). Consistent with other research, Weitzer and Tuch (1999) found that blacks were more likely than whites to perceive racial disparities in policing practices. This was mainly shaped by personal experiences of discriminatory police treatment. The study also found no class differences among blacks in their attitudes towards police officers, but blacks with higher education were more likely to be more critical in their attitudes towards police.

College

Perceptions of crime and disorder have played a major role in analyzing individuals and communities. It has also played a major role in analyzing perceptions of crime and disorder in

campus and university settings. University students are a unique population. For the most part students in college typically range from 18 to 24 years old (Jacobsen, 2011). Research on crime and disorder on college and university campuses has gained a great deal of significance in response to high-profile incidents of fatal shootings involving college students. Today, campuses have rapid-response communications systems, have gained more access to clinical records of students, and have moved towards a community oriented policing and approaches (COP) (Griffith, Hueston, Wilson, Moyers, & Hart 2004; Hart & Colavito, 2011).

Generally, campus crime is lower when compared to the general public, except for sexual violence. On campus across the United States, 11.2% of students (graduate and undergraduates) have experienced some type of sexual assault through physical violence or incapacitation (Rainn, 2016; Baum & Klaus, 2005). As a result, some students can be concerned about their safety as they navigate alleys and walkways of their campus (Chekwa, Thomas, & Jones, 2013; Wilcox, Jordan & Pritchard, 2007). On a closer analysis, Fisher (2003) found that there are some statistical differences between male and female students' perceived fear on campus. For example, 65% of females reported that poorly lit parking lots provoked fear compared to 34% of males. Also, 32% of females reported that overgrown or excessive shrubs increased perceived fear as opposed to only 19% of males.

Chekwa, Thomas and Jones (2013), revealed that 45% of students felt that security on campus was inadequate while 30% felt it was adequate. In the study, 60% of respondents had considered firearms, and 80% had considered taking self-defense courses (p.329). Patton and Gregory (2014), surveyed 11,161 college students. Their findings indicated that one-quarter of students perceived themselves to be very likely to be robbed. Researchers have also indicated that campus safety varied by different areas on campus. For instance, students felt safe in labs, at

the library, in classrooms, and at the student lounge. In contrast, parking lots, walkways, and bathrooms were the places where students felt the least safe.

Common Crimes on Campus

Youths begin to tryout alcohol and other drugs in their dormitories or at college parties. Too often the consequences of such behavior make students more susceptible to being victims of a crime (The Network of Victim Assistance, 2016). Campus police officers spend a substantial amount of time sanctioning relating to alcohol consumption. Despite the prohibition of alcohol use by people under the age of 21 years old, there is significant underage drinking. In fact, of greater concern, frequent binge drinking and the problem associated with that style of drinking have increased among underage students. In 2001, 43.6% of underage students were binge drinkers, and that did not change over the four-year survey period (Wechsler, Lee, Nelson, & Kuo, 2002). Also, 1 in 2 (50.9%) students reported that alcohol was “very easy” to obtain, and binge drinkers reported 56.9% reported even a higher accessibility to 56.9% (p. 227-228).

Drugs on college campuses are also prevalent and popular on college campuses. It is not only marijuana or stimulants, it is also prescription medication. According to Arria and Dupont (2010), in a recent study of 83 colleges, 62% of students with ADHD diverted the medication to someone without prescription. Furthermore, the fastest growing population of rape victims are among college students. According, Fedina, Holmes, and Backes (2016) key findings, unwanted sexual contact and sexual coercion appear to be the most prevalent on college campuses, this is followed by incapacitated rape, and attempted or completed forcible rape (2016, p. 15).

Traffic Issues

Broken Windows (Wilson and Kelling, 1982) dealt with order maintenance in a community. Residents of the foot-patrolled neighborhoods seemed to feel more secure in the presence of officers. Many individuals could perceive physical signs of disorder in their neighborhood, but being disturbed and bothered by disorderly individuals not utilizing sidewalks can create another factor for perceived disorder in a community. For pedestrians, a source of fear could be manifested when automobiles fail to give them "the right of way." Although, these may be signs of early disorder, unchecked behavior could cause more of the same. Wilson and Kelling (1982) explained that "unintended" behavior can lead to the breakdown of community control (p.3).

Universities across the nation have campus safety guidelines for students. For example, University of South Carolina has specific recommendations and guidelines for students who ride bikes, use a skateboard, and for pedestrians in general. Some of the safety guidelines include, ride on the street/in bike lanes, not on sidewalks, go with the flow of the traffic (not against it), obey all stop light and stop signs, give pedestrians the right of way, don't talk on your phone, and don't wear headphones or earbuds as you need to hear what is happening around you. Some recommendation for pedestrians include, use crosswalks, don't assume that drivers will stop for you, and wear bright cloth when walking at night (USC, 2017).

When these recommendations are not followed, it can lead to traffic congestion, stress and frustration for motorists, which can lead to "aggressive or violent behavior stemming from a driver's uncontrolled anger at the actions of another motorist" (DMC, 2017, para. 3). This can also include pedestrians and those who utilize a skateboard or a bike. Aggressive behavior may include socially offensive language, unreasonable or unnecessary vehicle movements, such as

tailgating, braking excessively, speeding, honking, flashing headlights, and not using signal lights (DMC, 2017). Taking bike, skateboard, and foot traffic as factors of disorder is appropriate in a college setting. This type of disorder may not only promote unpleasant behavior it also delays people for classes, work, meeting…etc.

Students General Attitudes of Campus Police

It is fundamental that we understand students' perceptions towards their campus police officers. Allen (2017) found that a third of students (most of them underage) mentioned that campus police would ruin their fun. The majority of students in the study explained that officers were simply doing their job to stop individuals from hurting themselves or others in the course of having fun.

Students' perceptions of campus police officers are valuable when it comes to arguments of whether campus officers should carry weapons on campus. Wilson and Wilson (2011), provided a unique insight of what students think regarding campus police officers carrying weapons. In the analysis of the data collected, 71.3% of males agreed that officers should be armed and only 44.1% of females agreed. Significant levels of support for enhancing the professional status of campus law enforcers (p.36). Unfortunately, many of the students in the study were not aware or did not understand the duties and functions of campus law enforcers.

Perceived Legitimacy of Campus Police

Sunchine and Tyler (2003) focus on understanding how individuals respond to different mechanisms of social control. In particular, the concepts of legitimacy are described as a "property of an authority or institution that leads people to feel that authority or institution is entitled to be deferred and obeyed" (p.514). Applying the concept of legitimacy to campus

policing helps us understand how students perceive campus law enforcement as authority figures and how likely students are to obey.

Legitimacy in a college campus has two components: distributive and procedural justice. Distributive justice can be described as how fairly campus police officers provide services to citizens. Distributive justice assumes that individuals will be more likely to support campus police officers when students perceive legal outcomes are distributed evenly among diverse social groups (Jacobsen, 2014; Sunshine & Tyler, 2003). On the other hand, procedural justice refers to how an authority applies rule consistently. For instance, if an underage student is caught drinking on school grounds, the quality of decision-making should remain the same for future students who are caught drinking. This involves respect, politeness, and consideration of one's view (Tyles & Fagan 2008; Jacobsen, 2014).

Furthermore, individual perceptions of police legitimacy may be shaped by vicarious experiences with law enforcement officers. Certain experiences can be influential on individual perceptions of police behavior such as personal encounters, and indirect encounters. Also, many of these encounters are internalized through social media, observations, and stories of others regarding their personal experience with law enforcement (Wilson & Wilson, 2011). Wilson and Wilson (2011), consider that "perceived values of campus law enforcement and safety services appears no less stringent than that held for their public counterparts" (p.36). Therefore, when considering campus police perceptions, the same rule applies, in terms of what they hear from others about their encounters.

Jacobsen's (2014) research found that students expect campus police to protect them from harm, but not interfere with their lives. In the study, students delegitimize the power of campus police officers by raising questions about their status as "real" officers. Students also

explained that campus officers overreact to the wrong types of behaviors. Students believed they had the right to have fun, but when an officer "infringes" on this right, the officer's legitimacy is diminished in the student's eyes. It is evident in this study that students do want officers to maintain order and safety, but when there is an over-presence of campus police officers, it diminishes students' perceptions of campus police legitimacy.

CHAPTER III: RESEARCH METHODS

Data

To collect students' perceptions of crime and disorder issues on campus, a survey was sent out to the university community in late spring. Surveys were emailed to all students on campus. Overall, about 12,873 surveys were sent out. Email distribution software was used to monitor interactions with the emails. Of the emails sent out, 5,892 had some form of interaction (opened, deleted, etc.). Out of these 5,892 surveys that had some form of interaction, 655 survey responses were collected. Follow up reminders were scheduled to be sent out at 2 and 4 week periods. Unfortunately, due to technical difficulties, these follow up emails were not distributed. This survey was sent out as a joint survey between the Central Washington Police Department and the Department of Law and Justice.

Research Questions and Hypotheses

Research Question #1: How do demographic variables influence perceptions of crime and disorder in a rural university campus? In particular, do specific variables of race, gender, and living on or off campus influence students' perception of crime and disorder?

Research Hypothesis #1a: Non-white respondents will be more likely to perceive higher levels of crime and disorder on campus when compared to white respondents.

Research Hypothesis #1b: Females will be more likely to perceive higher levels of crime and disorder when compared to men.

Research Hypothesis #1c: Students who live on campus will perceive higher levels of crime and disorder as opposed students who live off campus.

Research Hypothesis #1d: Those who identify LGBTQ will perceive higher levels of crime and disorder.

Research Question #2: How do attitudes about police legitimacy influence students' perceptions of crime and disorder in a rural university setting?

Research Hypothesis #2a: Students who score high in global police legitimacy will perceive lower levels of crime and disorder.

Research Question #3: College student's perceptions of crime and disorder can be related to their perception of police effectiveness.

Hypothesis 3a: The perceptions of police effectiveness score will have an impact on student's perception of crime and disorder.

Hypothesis 3b: Assuming that perception of effectiveness is statistically significant variable, specific perceptions of police effectiveness will have a stronger impact on students' perceptions of crime and disorder.

Research Question #4: Are perceptions of crime and disorder also related to the attitudes towards police?

Hypothesis 4a: Students who have positive (general and specific CWU police) global attitudes towards police will perceive lower levels of crime and disorder.

Hypothesis #4b: Students who score higher on attitudes towards police, police (general and specific) will have an impact on student's perceptions of crime and disorder.

Research Question #5: How does social cohesion influence students' perception crime and disorder?

Hypothesis #5a: Individuals with higher levels of social cohesion in their neighborhood will perceive less crime and disorder in their neighborhood.

Research and Hypothesis Discussion

In this study, I want to know how demographic variables influence perceptions of crime and disorder. Considering the different findings, there are different hypothesizes that are guided by previous research. For example, it was hypothesized in this study that females will be more likely to perceive higher levels of crime and disorder. According to the fear of crime literature that has found that females on average perceive more crime and disorder (Hipp, 2010). Also, non-white respondents will be more likely to perceive higher level of crime and disorder. Brunton-Smith (2011), found that non-whites were identified as significantly more fearful, although there were no evident differences in levels of perceived disorder. Furthermore, students who live on campus will perceive higher of crime and disorder. Regardless of the fact that college students experience lower crime rates when compared to the public (except for rape), there are some students have concerns about their safety while on college campuses (Checkwa, Thomas & Jones, 2013; Wilcox, Jordan & Pritchard, 2007). Equally important, the LGBTQ community will be more likely to perceive higher levels of crime and disorder. The United States has significant history in mistreating and discriminating against LGBT community. Today the LGBT community still faces discrimination based on sexual orientation and gender identity (Mallory, Hasenbush & Sears, 2015).

Students who see police officers as legitimate are more likely to obey. If students perceive higher levels of legitimacy, students are more likely to view officers with respect, trustworthy and will be more likely to obey. In addition, students will also view police officers as authority figures who effectively maintain and prevent crime. In contrast, students who perceive police as illegitimate, could feel like targets. Tyler and Wakslack (2004) explained that the authority of police is weakened and undermined when people feel they are being profiled by the

police. This leads people to perceive more crime and disorder when law enforcers are viewed with distrust, suspicion and ineffective at fighting crime and keeping the public safe.

If students perceive officers as effective, they will perceive lower levels of crime and disorder on campus. Students will have greater confidence in how well police perform their jobs, such as controlling and solving crimes. Students who have a higher score on their perceptions of police effectiveness will be statistically significant variable. Students who have a higher score on the police effectiveness scale will have lower scores on perceptions of crime and disorder scales. The judgments about police effectiveness are strongly associated with how likely residents are willing to cooperate with the police (Kochel, Parks & Mastrofski, 2011). If citizens do not see police officers as effective crime fighter whose job is to community safe, they are less likely to see police officers as a legitimate authority.

Perceived effectiveness of the police is often shaped by police practices, personal encounters, stories heard from other people and perhaps even the mainstream media. For example, empirical research has found that community policing practices have demonstrated to be effective in reducing citizen's perception of crime and disorder (Skogan & Frydl, 2004; Wilson & Kelling, 1982). Community policing practices enable police officers to build a relationship with the citizens they serve. As a result, citizens may view police officers as effective crime fighters that are keeping their neighborhoods safe. However, Wiesburd and Eck (2004) research indicates that while community policing may decrease perceptions of crime and disorder, community policing strategies do not seem to increase police effectiveness in reducing crime.

In this study, a main question is whether general police effectiveness and specific CWU police effectiveness will have a significant impact on perceptions of crime and disorder measures

allow us to capture the perceptions of police effectiveness separated for CWU police and police in general. Models can be run separately to investigate whether perceptions of general police effectiveness or specific police effectiveness have stronger influence on students' perceptions.

In this study, we want to know if perceptions of crime and disorder are related to their perception of crime and disorder. Given the previous findings, when community members and police officers have positive relationships, it leads to greater amount of interaction, cooperation, and satisfaction with police work. In turn, residents' perception of crime and disorder is diminished (Roh & Oliver, 2005; Worrall, 2009). Therefore, in this study it is hypothesize that students who have positive global attitudes towards police will be less likely to perceive crime and disorder on campus when compared to students who have negative attitudes towards the police. The multivariate models allow us to capture the attitudes of police separated for CWU police and police in general. Models can be run separately to investigate whether general police attitudes or specific CWU attitudes have a direct association on students' attitudes toward police.

Another question asked in this study is how social cohesion influences student's perception of crime and disorder. From Sampson, Raudenbush, and Earls (1997) study, it was revealed that neighborhoods characterized by higher levels of collective cohesion perceive and experience lower levels of physical and social disorder. Individuals with higher levels of social cohesion are also more likely to intervene when problems in their neighborhoods emerge. With this in mind, it is hypothesized that students with higher levels of social cohesion will perceive lower levels of crime and disorder.

Operationalization of Dependent Variables

Perception of Crime and Disorder Factor

Wilson and Kelling (1982) introduced the concept of how physical disorder could lead to crime in the landmark article *Broken Windows*, in which they articulate how disorder and minor incivilities play a larger role in the occurrence of criminal events. Initially, the list of disorders includes public gambling, public drinking, urination, street prostitution, congregation of idle men, youth dressed in gang-related apparel, panhandling, disturbing the peace, and vagrancy (Wilson & Kelling, 1982; Skogan, 2008). The rationale is that, "disorder causes the breakdown of people's beliefs about their neighbor's values and willingness to exercise control over via calling for police services, which is what causes people to be fearful" (Gau, Corsaro, & Brunson, 2014, p.585). When potential offenders perceive an accumulation of disorders, they assume that social controls are weak, and they increase their offending in the area as the conclude their chances of detection and apprehension in such areas are decreased (Wilson & Kelling, 1982).

Instrumentation

The CWU survey includes several general measures of perception of crime and disorder, including both physical and social disorder. Measures include, litter and trash, vandalism, underage drinking, drug usage, bike traffic, skateboard traffic, foot/pedestrian traffic, theft, people being assaulted, robbed, intimate partner violence, and stalking. The questions together create a 13-item inventory capturing respondent personal perceptions of crime and disorder issues on CWU's campus.

Perception of crime is measured assessing levels of how big or small are the following issues on campus (all items are measured on a three-point Likert scale: big problem (1), somewhat of a problem (2), and not a problem (3). Perception of crime and disorder was

measured with the following items: (1) people harassing or intimidating others; (2) underage drinking," (3) bike traffic; (4) skateboard traffic; (5) foot/pedestrian; traffic; (6) litter and trash; (7) vandalism; (8) drug use; (9) theft; (10) people being assaulted; (11) people being robbed; (12) intimate partner violence (physical or non-physical violence by a past or present significant other resulting in fear or injury; and (13) stalking.

The questions from the CWU survey provided us with a robust list of disorders that are consistent with Broken Windows literature factors. The thirteen questions tapped into general crime and disorder concept. The questions measured not only traditional types of disorder, but specific types of disorder, such as criminal behavior, social, and disorderly traffic behavior. Factor analysis using a varimax rotation was used to group similar variables into latent variables. Three factors emerged: (1) general perception of crime and disorder, (2) traffic congestion, and (3) alcohol and drug abuse.

General Crime and Disorder Factor

In the first latent variable, the highest factor loading included, assault (.814), followed by robbery (.810), stalking (.756), intimate partner violence (.740), people harassing or intimidating (.699), and theft (.621). These factors can be identified as a type of criminal behavior. It also important to note that vandalism (.560), and litter and trash (.390) also loaded in first latent variable, but not as heavily as other factors. These factors play an important role and they are identified as physical disorder that insinuates that no one cares and brings more of the same.

Traffic Issues Factor

The second latent variable that emerged from the factor analysis, had three factor loadings: bike traffic (.891), skateboard traffic (.871), and foot traffic (.628). The concept of disorder has evolved significantly, and the factors of bike, skateboard, and foot traffic being a

problem may be recognized as disorderly conditions. Police, in the eyes of the public, are expected to maintain public safety by monitoring movements of traffic.

Alcohol and Drugs Factor

Campus police officers spend a substantial amount of time sanctioning relating to alcohol consumption. Wechsler, Lee, Nelson and Kuo (2002), noted that underage drinking is a major problem in America. In their findings, these scholars reported that, despite the prohibition of alcohol use by people under the age of 21 years old, there is significant underage drinking. In fact, of greater concern, frequent binge drinking and the problems associated with that style of drinking have increased among underage students. In 2001, 43.6% of underage students were binge drinkers, and that did not change over the four survey years.

The third latent variable seems to tap into alcohol and drug abuse in a college setting. The highest loading was underage age drinking (.873), and drug use (.858). It is worth mentioning that both vandalism (.419) and theft (.363) had high loading values with this factor (however, both vandalism and theft loaded higher on the general crime construct). These could be related to the aftermath of drinking or using drugs. Under the influence, people may be more vulnerable to having someone steal their belonging. Also, people under the influence of drugs or alcohol may engage in disorderly conduct involving destruction of property.

Table 1. Dependent Variable Factor Loadings

Survey Question	General Perception of Crime & Disorder	Traffic Disorder	Drugs and Alcohol
People harassing or intimidating	**.699**	.104	.110
Litter and Trash	**.390**	.196	.257
Vandalism	**.560**	.035	.419
Theft	**.621**	.032	.363
Assault	**.814**	.060	.069
Robbery	**.810**	.003	.117
Intimate Partner Violence	**.740**	.160	.078
Stalking	**.756**	.132	.063
Bike traffic	.079	**.891**	.083
Skateboard traffic	.120	**.871**	.056
Foot traffic	.095	**.628**	.164
Underage drinking	.090	.195	**.873**
Drug use	.231	.108	**.858**

Operationalization of Independent Variables

This research examines five independent variables: social cohesion, legitimacy, perceptions of police effectiveness, attitudes, and contact with campus police.

Social Cohesion

Generally, social cohesion can be defined as, "an emotional and social investment in a neighborhood and sense of shared destiny among residents" (Uchida, Swatt, Solomon & Varano, 2013, p.2). Socially cohesive neighborhoods can depend on residents' mutual trust and willingness to intervene (Sampson et al., 1997). Uchida and associates (2013), define it as the ability to produce a, "social action to meet common goal and preserve shared values" (p.2). On the other hand, low cohesion neighborhoods can be identified as having unclear rules, mistrust or fear exist, where individuals are less likely to intervene (Sampson et al., 1997).

Sampson et al., (1997) study social cohesions was represented by five items. Respondents were asked how strongly they agreed on the following statements: (1) "people around here are

willing to help their neighbors"; (2) "this is a close-knit neighborhood"; (3) "people in this neighborhood can be trusted"; (4) people in this neighborhood generally don't get along with each other"; and (5) "people in this neighborhood do not share the same values" (p.278).

CWU survey measures of social cohesion were included. Questions asked respondents to indicate how much they agreed or disagreed with the following statements: (1) "people around here are willing to help friends"; (2) "this is a close-knit neighborhood; (3) generally get along with each other"; (4) "people in this neighborhood generally get along with each other"; (5) "people in this neighborhood share the same values"; (6) "very few people know me; (reverse coded)"; (7) "I can recognize most of the people who live in my neighborhood"; (8) "I feel at home in this neighborhood"; and (9) "people in this neighborhood work together to solve problems."

Respondents were provided with five responses: strongly agree, agree, neither agree nor disagree, and disagree or strongly disagree. A factor analysis was used to create a single measure of social cohesion using the survey questions. The Cronbach alpha score indicated an acceptable reliability score of (α=.854). Item scales were recoded, so higher scores indicated higher agreement.

Table 2. Social Cohesion Questions Factor Loading

	Factor
People around here are willing to help friends	.705
This is a close-knit neighborhood	.826
People in this neighborhood generally get along with each other	.771
People in this same neighborhood share the same values	.732
Very few people know me	.464
I can recognize most of the people who live in my neighborhood	.621
I feel at home in this neighborhood	.736
People in this neighborhood work together to get problems solved	.736

Global Legitimacy

Legitimacy can be described as "a property of an authority or institution that leads to people feeling that that the authority or institution is entitled to be deferred to and obeyed" (Sunshine & Tyler, 2003 p. 514). Legitimacy measures often ask respondents their beliefs on how honest and trustworthy are police officers. Other legitimacy measurements include everyday encounters or how they perceived law enforcement regardless of personal encounters (Tyler, 2011).

The original CWU survey consisted of three items that measure police legitimacy: (1) "you should accept the decisions made by the police, even if you think they are wrong"; (2) "you should accept the police decisions made by the police, even if you don't understand their justification"; (3) "there are times when it's okay to for you to ignore what the police tell you." Respondents were asked with five responses: strongly agree, agree, neither agree nor disagree, and disagree or strongly disagree.

A factor analysis was used to create a single measure of legitimacy using the three survey questions. All three questions loaded on a single construct. Item scales were recoded so that higher scores indicated higher perceptions of legitimacy.

Table 3. Global Legitimacy Questions Factor Loadings

Factor	Loadings
You should accept the decisions by the police, even if you think they are wrong	.894
You should accept the decisions made by the police, even if you don't understand their justification	.896
There are times when it's okay for you to ignore what the police tell you	.534

Perceptions of General Police Effectiveness

Perceived police effectiveness is normally measured through public opinion surveys. Maslov (2016) measured police effectiveness by asking respondents whether they hold "favorable views" of the police; "approve of" the police; "respect" the police; are "satisfied with" the police; have "confidence in" the police; or "trust" the local, community, municipal, provincial/state police. Maguire (2003) suggested that police performance must measure a broad

range of things surrounding police work that go beyond citations, or arresting offenders. Measurements that involve preventing crime and disorder or solving community problems.

Kochel, Parks, and Mastrofski (2011), measured police effectiveness by asking the following questions; (1) The police in my community are able to maintain order on the streets; (2) Overall I am satisfied with the service provided by the police in my community; (3) The police in my community respond quickly when people ask them for help; (4) The police in my community know how to carry out their duties properly, and so on (p. 911). Similar to the questions in the survey for the current research, these questions capture citizen's perception of police effectiveness.

The original survey captures students' view of police effectiveness. For example, the police keep the public safe, the police solve problem, the police effectively control crime, and the police provide quality service are questions regarding student's confidence in the police. In addition, the statements, the police are easy to contact, and police are a useful resource are questions that tap into the accessibility of police, which may shape public's perception of police effectiveness. Response categories ranged from *Strongly Agree* (5) to *Strongly Disagree* (1). These questions were asked for both police in general (General Police Effectiveness) as well as specifically for CWU police effectiveness. This allows comparisons between respondents' views about general police effectiveness and CWU police effectiveness

General Police Effectiveness

The CWU survey asked respondents, "In general, how much do you agree or disagree with the following statements?" The following options were provided: (1) The police keep the public safe; (2) The police solve problems; (3) The police effectively control crime; (4) The

police provide quality services; (5) The police are easy to contact; (6) The police are a useful resource.

Perceptions of CWU Police Effectiveness

The CWU survey asked respondents, "when considering Central Washington University police only, how much do you agree or disagree with the following:" (1) The CWU police keep the students safe; (2) The CWU police solve problems; (3) The CWU police effectively control crime; (3) The CWU police provide quality service; (4) The CWU police are easy to contact; and (5) The CWU police are a useful resource.

A factor analysis was conducted for each set of questions (general police effectiveness and CWU police effectiveness). The item questions were summarized data into one latent variable per group with a reliability score of .924 for student's perceptions of general police effectiveness, and .945 CWU police effectiveness. Item scales for both CWU and general police effectiveness were recoded, higher scores indicated higher agreement, *Strongly Agree* (5) to *Strongly disagree* (1).

Table 4. Perceptions of General Police Effectiveness Factor Loadings

Factor	Loadings
The police keep the public safe	.887
The police solve problems	.889
The police effectively control crime	.869
The police provide quality contact	.896
The police are easy to contact	.692
The police are useful resource	.863

Table 5. Perceptions of CWU Police Effectiveness Factor Loadings

Factor	Loadings
The CWU police keep the students safe	.899
The CWU police solve problems	.920
The CWU police effectively control crime	.907
The CWU police provide quality service	.930
The CWU police are easy to contact	.750
The CWU police are a useful resource	.908

General Attitudes About Police and Specific Attitudes About CWU Police

Hurst and Frank (2000) measured juvenile attitudes towards police by using the four global attitude questions: (1) In general, I trust the police; (2) In general, I am satisfied with the police in my neighborhood; (3) In general, police officers do a good job; and (4) In general, I like the police. Some of these statements are similar to the questions asked in the survey. Other survey questions were used to make more specific measures of attitudes towards police. For example, "do police officers do a good job of stopping people from using drugs?" In the survey, specific measures were used to measure CWU police.

Global Attitudes Towards Police

The survey asked respondents, "In general, how much do you agree or disagree with the following statements:" (1) I like the police; (2) Police officers are hardworking; and (3) Police are professional. The survey also asked the respondents: In general, how much do you agree or disagree with the following statements about behavior and care: The following statements were provided: (1) Police officers are often rude to the public (recoded); (2) Police officers are approachable; (3) The police care about the public; (4) The police are generally friendly; and (5) Police officers are honest.

Specific Attitudes Towards CWU Police

The survey asked respondents, "When considering Central Washington University police only, how much do you agree with the following statements?" The survey also asked respondents, "When considering Central Washington University police only, how much do you agree or disagree with the following." The options provided for the first statement were: (1) I like CWU police; (2) CWU police are hardworking; (3) CWU police are professional. The following options were provided for the second question: (1) CWU police officers are often rude

to students (reverse coded); (2) CWU police are approachable; (3) The CWU police care about students; (4) The CWU police are generally friendly; (5) The CWU police are honest.

For the present study, eight-item questions from the survey were selected to conduct a factor analysis to create a single measure. The data was summarized into one latent variable, which was labeled "General Attitudes Towards Police." The factor has an acceptable reliability score of (α=.932). The same statements mirrored the specific attitudes towards campus law enforcement. A factor analysis was also conducted to summarized data into one latent variable with a reliability score of (α=.947). This factor is labeled as "Specific Attitudes towards CWU Police." All questions (both general and specific CWU attitudes towards police/campus police) response categories ranged from *Strongly Agree* (5) to *Strongly Disagree* (1).

Table 6. General Attitudes Towards the Police Questions Factor Loadings

Factor	Loadings
I like the police	.843
Police officers are hardworking	.817
Police are professional	.847
Police officers are often rude to the public (reverse coded)	.760
Police officers are approachable	.778
The police care about the public	.851
The police are generally friendly	.881
Police officers are honest	.834

Table 7. Specific Attitudes Towards CWU Police Questions Factor Loadings

Factor	Loadings
I like CWU police	.880
CWU police are hardworking	.861
CWU police are professional	.867
CWU police officers are often rude students (reverse coded)	.827
CWU police are approachable	.901
The CWU police care about students	.827
The CWU police are generally friendly	.906
The CWU police are honest.	.870

Other Variables of Interest

This research includes several variables that have consistently shown to be predictors of differences in perceptions of crime and disorder: gender, race, sexual orientation, class standing, and living off or on campus.

Gender

For the current study, gender will be measured as a dichotomous level variable. Respondent in the survey were specifically asked, “What is your gender?” Variables were itemized as 0= Female, 1 = Male.

Race

The original survey asked, “Which describes your racial/ethnic background? Check all that apply. The following list was provided: (1) Caucasian (white), (2) African-American (black), (3) Asian-American, (4), Hispanic/Latino, and (5) Other.

For the current study, some of the racial/ethnic background variables could not be used for a meaningful comparison. Each of the five-items were recoded into dichotomous variables consisting of (0 = white and 1= non-white). African-American (black), Asian-American, Hispanic/Latino were all recoded into non-white.

Sexual Orientation

The United States has significant history in mistreating and discriminating against the LGBT community. Today the LGBT community still faces discrimination and harassment, not only in their everyday lives, but by law enforcement based on their sexual orientation and gender identity (Mallory, Hasenbush, & Sears, 2015). Therefore, based on the knowledge of the LGBT community oppression they are also more likely to view crime and disorder in general. This is possibly influenced by their prior victimization, whether it was physically or emotionally, or both.

The original survey question had a seven-item scale that measured sexual orientation. The specific question asked, “Which of the following sexual orientation do you most closely identify with: (1) straight, (2) gay or lesbian, (3) bi-sexual, (4) questioning, (5) asexual, (6) prefer not to say, and (7) other.

For the current study, the multi-category nominal variable of sexual orientation was turned into a dichotomous variable (0 = Straight, 1 = Non-Straight). Straight was coded and 0,

and all other categories were labeled as 1, for those who preferred not to say were coded as missing.

Class Standing

Central Washington University uses earned number of quarter hours to categorize students into five distinct categories based on credits completed: Freshman 0-44.9, Sophomore 89.9, Junior 90-134.9, Senior 135, and above. There may be a significant difference between a first-year student, senior, or a graduate student.

The Network of Victim Assistance, (2016), explains that many youths' experiment with alcohol and other drugs in their dormitories or at college parties. In particular, "first year students' lack of maturity is a dominant theme that explains their drinking behaviors during their early college" (Bulmer, Barton, Liefeld, Montauti, Santos, Richard, Hnath, Pellertier and Lalanne, 2016, p.241). In that event, too often the consequences of such behavior make students more susceptible to victimization and encounters with campus law enforcement. Research on perception of crime and disorder has generally found that individuals who have been victimized before perceived more crime and disorder than those who have been victimized. Also, an encounter with campus law enforcement may shape students' perceptions of effectiveness, legitimacy, and attitudes. Certain personal experiences with law enforcement can shape individual's behavior about law enforcement (Wilson & Wilson, 2011).

The original question in the survey asked, what is your class standing as of the 2015 academic school year: The following options were provided: (1) Freshman, (2) sophomore, (3) junior, (4) senior, (5), graduate student, and (6) other. For the current research, each class standing categorized as a separate dichotomous dummy variable. "Graduate student" and "other"

were excluded since the focus of this study is guided by traditional college students, Freshman to Senior.

The items were coded as the following:

1. Freshman = 0, Non-Freshman = 1
2. Sophomore = 0, Non-Sophomore = 1
3. Junior = 0, Non-Juniors = 1
4. Senior = 0, Non-Seniors = 1

Off Campus or On Campus

The original CWU survey asked students, "While attending Central Washington University, do you currently live on or off campus?" The following options were provided: (1) on campus, (2) off campus in Ellensburg, and (3) off campus outside of Ellensburg.

For the present study, the multi-category nominal variables of on/off campus were turned into a dichotomous variable. Off campus in Ellensburg, and off campus outside of Ellensburg were grouped together, because living off-campus means the respondent is not living in a controlled setting as it with campus living arrangements. Off campus was coded as "0," and on campus was coded as "1" (0= Off campus 1= On campus).

Table 8. All Variables in The Study

Descriptives of Study Variables

Variables	Mean	Range	Percent
Whites	____	____	75.8%
Females	____	____	59.8%
Straight	____	____	88.9%
First Year Students	____	____	18.9%
Sophomores	____	____	16.1%
Juniors	____	____	32.6%
Seniors	____	____	32.1%
Living off Campus	____	____	57.2%
Global Legitimacy	2.232	0 – 4.54	____
Social Cohesion	3.291	0 – 5.73	____
General Attitudes	3.450	0 – 4.86	____
CWU Attitudes	3.650	0 – 4.91	____
General Effectiveness	3.756	0 – 5.14	____
CWU Effectiveness	3.591	0 – 4.80	____
Dependent Variables			
General Crime	1.459	0 – 4.90	____
Traffic Disorder	1.755	0 – 4.24	____
Drug and Alcohol	2.179	0– 4.66	____

NOTE: A factor loading is used to summarized data into a single variable.

Descriptive Statistics of Study Variables

The sample that was used shows a significant amount of diversity. In the sample used, 59.8% were women, almost a quarter of the population were non-white (24.2%). In addition, 57.2% of students lived off campus. Of those participants, 18.9% were first year students, 16.1% sophomores, 32.6% juniors, and 57.2% were seniors.

Independent Variable Description

In this sample six theoretical variables were used to predict how much of an impact they have on perceptions of crime and disorder. The variables are legitimacy, social cohesion, general attitudes, CWU attitudes, general effectiveness, and CWU effectiveness. The Social Cohesion factor had a minimum score of 0, and a maximum value of 5.73 with mean of 3.291, and a median value of 3.314. The Global Legitimacy factor had a minimum score of 0 and a maximum value of 4.54 with a mean of 2.232, and the median value is 2.268.

General Attitudes Towards Police factor (General Attitudes) had a minimum score of 0 and a maximum value of 4.86., a mean of 3.450, and a median value of 3. 540. In regard to Specific Attitudes Towards factor CWU Police (CWU Attitudes), the minimum score is 0 and the maximum value is 4.91, mean of 3.650, and the median value of 3.680. Perceptions of General Police Effectiveness (General Effectiveness), had a minimum score of 0 and a maximum score of 5.14, a mean score of 3.756, and the median value of 3.852. In addition, student's perceptions of CWU Police Effectiveness (CWU Effectiveness) had a minimum score of 0 and a maximum value of 4.80, the mean of the factor is 3.59, and the median value of 3.598.

Dependent Variable Frequencies

The dependent variable for this study is made of three constructs that were created using factor analysis. A total of 499 cases were included in the factor. The constructs are General Perceptions of Crime and Disorder, Traffic Disorder, and Drugs and Alcohol. The first construct, General Perceptions of Crime and Disorder had a minimum score of 0 and a maximum value of 4.90 with a standard deviation of 1. The mean of the factor is 1.459 and the median value is 1.1391. The second construct, Traffic Disorder had a minimum score of 0 and maximum value of 4.24 with a standard devaluation of 1.000. The mean factor is 1.755 and the median value is

1.749. Lastly, the third construct, Drug and Alcohol Disorder Factor, had a minimum score of 0 and a maximum value of 4.66 with a standard deviation of 1.000. The mean total is 2.179 and the median value is 2.183.

Table 9. Class Standing ANOVA

General Perception of Crime & Disorder	Traffic Disorder	Drugs and Alcohol
F Value (sig)	**F Value (sig)**	**F Value (sig)**
.523 (.667)	1.687 (.169)	1.418 (.237)

NOTE: *Significant at the .05 Level *p<.05 **p<.01 ***p<.001

Table 10. ANOVA: Means Comparison Between Class Standing and Perceptions of Crime and Disorder Factor (n = 655)

		Sum of Squares	Df	Mean Square	F
General Crime	Between Groups	1.573	3	.524	.523
	Within Groups	495.865	494	1.004	
Traffic Disorder	Between Groups	5.048	3	1.683	1.687
	Within Groups	492.834	494	.998	
Drug Alcohol f	Between Groups	4.240	3	1.413	141.13
	Within Groups	492.367	494	.997	

NOTE: *Significant at the .05 Level

CHAPTER IV: FINDINGS

Bivariate Relationships Results

Class Standing

Table 9 shows the ANOVA comparing the average score of the factor for perception of crime and disorder between university class. The one-way ANOVA was used to examine the mean difference between General Perceptions of Crime factor (F = .523, p = .667), Traffic Disorder (F = 1.687, p = .169), and the Drug and Alcohol Disorder Factors (F = 1.418, p = .237). based on class standing. The test did not reveal significant group difference. The magnitude of the correlation falls under a weak relationship: r = +.10 to + .19 and r = -.10 to -.19. [1]This suggests that, on average, perceptions of crime and disorder do not differ based on university class.

Social Cohesion

When looking at Social Cohesion and General Crime Factor, there is a negative correlation between them (r = -.099, p = .027). This analysis suggests that there is a statistically significant correlation between Social Cohesion and The General Crime factor. However, Table. 9, Class Standing ANOVA indicates there is not a relationship between the two variables. Table 9, also indicates there is not statistically significant correlation between Social Cohesion and Traffic Disorder Factor, and there is not relationship between the two variables (r = -.056, p = .212). Similarly, there is not a significant correlation, nor relationship between Social Cohesion and Drugs and Alcohol factor (r = -.046, p = .303).

[1] Due to the ANOVA not showing significance, the coefficients have not been interpreted.

Global Legitimacy

When conducting a *Pearson's r* correlation for Global Legitimacy factor, there was a not a significant correlation between the three dependent variables, General Crime (r = -.099, p = .027), Drugs and Alcohol (r = -.056, p = .212), and Traffic Disorder factors (r = -.046, p = .303). This analysis suggests the on average police legitimacy does not affect students' perceptions of crime and disorder.

Perceptions of General Police Effectiveness

The *Pearson's r* correlation revealed there is statistically significant negative correlation between the General Police Effectiveness factor and the General Crime factor. Therefore, it is predicted that as General Police Effectiveness increases, the General Crime Factor decreases (r = -.146, p = .001). The analysis for Traffic Disorder factor also revealed a statistically significant negative correlation between General Police Effectiveness and the Traffic Disorder factor. As General Police Effectiveness factor increases, the Traffic Disorder factor decreases (r = -.101, p = .024). General Police Effectiveness and Drugs and Alcohol Disorder the analysis indicates there is a statistically significant positive correlation, which suggest that that as General Police Effectiveness factor increases, Drug and Alcohol Crime factor also increases (r = .115, p = .010).

Perceptions of CWU Police Effectiveness

A *Pearson's r* correlation for perceptions of CWU Police Effectiveness and General Crime Factor reveals a statistically significant negative correlation between the two variables. This analysis indicates that as CWU Police Effectiveness factor increases, General Crime factor decreases (r = -.165, p = .000). On the other hand, perceptions of CWU Police Effectiveness and Traffic Disorder factor did not have a significant relationship (r = -.069, p = .125). Although, perceptions of CWU Police Effectiveness and Drugs and Alcohol Disorder factor did have a

statistically positive correlation. The findings indicate that as CWU Effectiveness factor increases, Drugs and Alcohol Disorder increases (r = .139, p = .002).

Global Attitudes Towards Police

The *Pearson's r* correlation for Global Attitudes Towards Police and General Crime Factor shows a statistically negative correlation between the two variables. As Global Attitudes Towards Police Factor increase, General Crime factor increases (r = -.124, p = .006); the strength of the relationship is weak. Global Attitudes Towards Police and Traffic Disorder also has a statistically significant negative correlation between the two variables. As Global Attitudes Towards Police increase, Traffic Disorder factor decreases (r = -.118, p = .008). Moreover, Global Attitudes Towards Police and Drugs and Alcohol factor has a positive statistically significant relationship. This analysis suggests that as Global Attitudes Towards Police increase so does Drugs and Alcohol factor increases (r = .147, p = .001).

Specific Attitudes Towards CWU Police

Specific Attitudes Towards Police factor demonstrates a statistically negative correlation with the General Crime Disorder factor. Therefore, this analysis suggests that when Specific Attitudes Towards Police increase, the General Crime and Disorder factor decreases (r = -.126, p = .005). Moreover, in this analysis, Specific CWU Attitudes Towards CWU Police and the Traffic Disorder Factor had no relationship. On the other hand, Specific CWU Attitudes Towards and Drugs and Alcohol factor did have a statistically significant positive significant relationship. This also indicates that as Specific Attitudes Towards CWU Police increases, so does the Drugs and Alcohol factor increase (r = .163, p = .000).

Difference of Means Tests

Table 11. Independent Sample T-Test: Means Comparison Between Gender Perceptions of Crime and Disorder Factors
(n = 655)

Gender	F	t(df)	Significance
General Crime	5.846	497	.787
Traffic Disorder	.006	497	.036
Drug and Alcohol	.029	497	.001

NOTE: Significance based on two tailed test

Gender

An independent sample *t*-test was conducted to compare participants' gender to Perceptions of Crime and Disorder Factors. Of those sample participants, on average, students who identified as males ($\bar{x}$ = 1.475, SD = 1.045) compared to those who identified as female ($\bar{x}$ =1.450, SD = .9736) did not differ in scores. This indicates that the difference in means was not found to be statistically significant (t = -.270, *p* = .787). Therefore, this finding suggests that on average men and women do not differ in the way they perceive general crime in a rural university setting.

The next independent *t*-test compare the difference of participants' gender to perceptions of Traffic Disorder factor on campus. Of those sample participants, on average, males ($\bar{x}$ = 1.633, SD = .9788) reported less traffic disorder on campus when compared to females ($\bar{x}$ = 1.827, SD = 1.007). This difference in means was found to be statistically significant (t = 2.098, *p* = .036), which indicates that on average women perceive more traffic disorder when compared to men

An independent *t*-test was conducted to compare the difference in participant's gender to perceptions of Drugs and Alcohol factor on campus. Of those sample, on average, males ($\bar{x}$ =

1.980, SD = .9789) perceive less Drugs and Alcohol factor on campus when compared to females ($\bar{x}$ = 2.298, SD= .9950). The difference in means is statistically significant (t = 3.473, *p* = .001). This analysis suggests that on average gender does influence how individuals perceive drugs and alcohol, on average female students perceive more drugs and alcohol on campus than male students.

Table 12. Independent Sample T-Test: Means Comparison Between Race Perceptions of Crime and Disorder Factors
(n = 655)

Race	F	t(df)	Significance
General Crime	3.450.	497	.154
Traffic Disorder	2.546	497	.485
Drug and Alcohol	.084	497	.458

NOTE: Significance based on two tailed test

Race

An independent sample *t-test* was conducted to compare the difference of students' race to Perception of Crime and Disorder factors, of those sample participants, one average students who identified as white ($\bar{x}$ = 1.423, SD = .9669), and those who identified as non-whites ($\bar{x}$ = 1.573, SD = 1.095) did not differ in scores. This analysis indicates that the difference in means was not found to be statistically significant (t = -1.428, *p* = .154), which suggest that on average students' race does not impact the way they perceive general crime on campus.

An independent *t*-test was also conducted to compare the difference of students' race to Perception of Crime and Disorder factors, of those sample participants, on average, students who identified themselves as white ($\bar{x}$ = 1.423, SD = .9669, compared those who identified as non-white ($\bar{x}$ = 1.737, SD = .9849) did not differ in scores. This indicates that the difference in means

was not found to be statistically significant (t = -.699, p = .485). This analysis suggests that students' race is not a contributing factor in the way they perceive crime and disorder on campus.

When comparing the difference of students' race, and traffic disorder, on average, students who identify themselves as white ($\bar{x}$ = 2.161, SD = .9937), compared to those who identify themselves as non-white ($\bar{x}$ = 1.737, SD = .9849) did not differ in scores. This indicates that the difference in means was not found to be statistically significant (t = -.699, p = .485). This analysis suggest that student's race is not a contributing factor to whether they perceive more or less traffic disorder on campus.

When comparing the difference of students' race, and their perception of Drugs and Alcohol on campus, on average, those who identified as white ($\bar{x}$ = 2.161, SD = .9937) compared to those who identified as non-white ($\bar{x}$ = 2.233, SD = 1.021) did not differ in scores. This analysis indicates that the difference of means was not found statistically significant (t = -.742, p = -.458), which indicates suggest that on average participants' race in this sample is not a contributing factor for students' perception of Drugs and Alcohol factor on campus.

Sexual Orientation

An independent sample *t*-test was conducted to compare the difference of students' sexual orientation to Perceptions of Crime and Disorder factors, of those sample participants, on average, those who identified themselves as straight ($\bar{x}$ = 1.442, SD = .9897) compared to those who identified themselves as non-straight ($\bar{x}$ = 1.568, SD=1.051) did not differ in scores. This indicates that the difference in means was not found to be statistically significant (t = - .873, p = .383), which suggest that on average sexual orientation in this sample does not impact students' Perception of Crime and Disorder on campus.

When comparing students' sexual orientation to Traffic Disorder factor, of those sample participants, on average, those who identified themselves as straight ($\bar{x}$ = 1.766, SD= 1.002), compared those identified themselves as non-straight ($\bar{x}$ = 1.691, SD = 1.0001) did not differ in scores. This indicated that the difference in means was not found to be statistically significant (t = .518, p = .605), which suggest that on average sexual orientation in this sample does not impact student perception of Traffic Disorder on campus.

When comparing the differences of students' sexual orientation to the Drugs and Alcohol Disorder factor, of those sample participants, on average, students who identified themselves as straight ($\bar{x}$ = 2.202, SD = .9770), compared to those who identified themselves as non-straight ($\bar{x}$ = 1.976, SD =1.160) did not differ in scores. This indicates that the difference in means was not found to be statistically sign (t = 1.570, p = .117), which suggest that on average sexual orientation in this sample does not impact students' perception of Drugs and Disorder on campus.

Table 13. Independent Sample T-Test: Means Comparison Between Students Who Live On/Off Campus, and Perceptions of Crime and Disorder Factors (n = 655)

On/Off Campus	F	t(df)	Significance
General Crime	.106	496	.121
Traffic Disorder	.492	496	.143
Drug and Alcohol	.002	496	.004

NOTE: Significance based on two tailed test

On or Off Campus off Campus

An independent sample *t*-test was conducted to compare the differences in students who live on or off campus to Perceptions of Crime and Disorder factor. Of those sample participants, student who live on campus ($\bar{x}$ = 1.520, SD = .968), compared students who live off ($\bar{x}$ = 1.379,

SD = 1.038 campus did not differ in scores. This indicates that the difference in means was not found to be statistically significant (t = 1.555, p = .121), this suggest Perceptions of Crime and Disorder is not impacted by whether student live on off campus.

When comparing the differences of students who live on campus and off campus, to the General Crime factor, of those sample participants, on average, students reported who living campus, ($\bar{x}$ = 1.678, SD=.973), compared to students who reported living off campus ($\bar{x}$ = 1.811, SD = 1.018) scores did not differ. This indicates that this difference in means was not found to be statistically significant (t = 1.466, p = .143), which suggest that on average whether a student lives on or off campus does not influence their perception of Traffic Disorder on campus.

When comparing the difference of students who live on or off campus to the Drugs and Alcohol factor, of those sample participants, on average, those who reported living on campus ($\bar{x}$ = 2.331, SD =. 999) were more likely to perceive drugs and alcohol disorder than students who reported living off campus ($\bar{x}$ = 2.070, SD = .989). This indicates that the difference in means was found to be statistically (t = -2.900, p = .004), suggesting that students' living arrangements in this sample seem to have an impact on how they perceive drugs and disorder on campus.

Table 14. Independent Sample T-Test: Means Comparison Between Students Who Have Had Contact/No Contact With Police, and Perceptions of Crime and Disorder Factors (n = 655)

Contact/No Contact	F	t(df)	Significance
General Crime	.134	497	.686
Traffic Disorder	.092	497	.398
Drug and Alcohol	.797	497	.079

NOTE: Significance based on two tailed test

Contact or No Contact with CWU Police

An independent sample *t*-test was conducted to compare the difference of students who have had contact or no contact with CWU police, to Perceptions of Crime and Disorder factor. Of those sample participants, on average, students who had contact with CWU police ($\bar{x}$ = 1.4764, SD = 1.008), compared to those who did not have contact with CWU police ($\bar{x}$ = 1.440 SD=.991, did not differ in scores. This analysis indicated that that the difference in means was not found to be statistically significant (t = -.404, *p* = .686), which suggest that whether students had contact or not contact with CWU police, it did not impact their perceptions of crime and disorder on campus.

When comparing the difference of those who live or on off campus to the Traffic Disorder factor, of those sample, on average, students who had contact with CWU police ($\bar{x}$ = 1.719, SD = .9911), compared to those who did not have contact with CWU police ($\bar{x}$ = 1.795, SD = 1.010), did not differ in scores. This indicates that the difference in means was not found to be statistically significant (t = .845, *p* = .398), which suggest that whether students live on or off campus does not impact their perceptions of traffic disorder on campus.

When comparing those who live on or off campus to the Drugs and Alcohol and Disorder factor, on average students who had contact with CWU police ($\bar{x}$ = 2.254, SD = .1.028), compared to those who did not have contact with CWU police ($\bar{x}$ = 2.096, SD = .963), did not differ in scores. This indicates that the difference in means was not found to be statistically significant (t = -.157, *p* = .079), which suggest that whether students live on or off campus does not impact their perceptions of traffic disorder on campus.

Multivariate Models: General Crime Disorder

Model 1.1

The General Crime Disorder model examines various descriptive variables: race, gender, sexual orientation, class standing (1st year students, sophomores, juniors), and students who live on or off campus. Overall, this model accounts for about 1% of the variance in General Crime Disorder, and is not statistically significant (F = .702, p = .671), (R^2= .010). In this model, none of the variables achieved statistical significance; Race (b = .128, b= .230, gender (b = .007, p = .942), sexual orientation (b = .136, p = .351), first year students (b = .033, p = .825), sophomores (b = -.079, p = .579), juniors, (b = -.008, p = .943), and living of or on campus, (b = -.139, p =.190).

Model 1.2

In this model, 2% of the variance in General Crime Disorder is explained (R^2= .020). Overall, the model was not statistically significant (F = 1.000, p = .442). The focus of the model were the following variables Contact or No Contact with CWU police, Global Legitimacy, and Social Cohesion. In this model, none of the variables achieved statistical significance. Although, it is important to note that Social Cohesion variable was close to achieving statistical significance (b = -.090, p = .053).

Model 1.3

In this model, General Attitudes Towards Police and General Attitudes Towards Police Effectiveness were added to the model. Overall, the model explained 4.3% of the variance (is R^2= .043), and is not statically significant (F = 1.400, p = .162). Again, none of the variables achieved statistical significance.

Model 1.4

In this model General Attitudes Towards Police, and General Attitudes Towards Police Effectiveness were excluded, and replaced with Specific Attitudes Towards CWU Police, and

Specific Attitudes towards CWU Police Effectiveness. The model explained 3.7% of the variance (R^2= .037). Overall the model did not achieve statistical significance (F = 1.546, *p* = .104). When looking at the variables, none of them achieve statistical significance except for Specific Attitudes Towards Police Effectiveness (b = -.189, *p* = .048). This indicates that for one point increase in General Crime Disorder factor, Specific Attitudes Towards Police Factor decreases.

Multivariate Models: Traffic Disorder

Model 2.1

The Traffic Disorder model examines descriptive variables: race, gender, sexual orientation, class standing (first year students, sophomores, juniors), and students who live on or off campus. This model also explains about 2.3% of the variance in perceptions of Traffic Disorder (adjusted R^2= .023). This model did not achieve statistically significance (F = 1.615, p < .129). Gender was the only variable that was statistically significant in this model. On average, males perceive less General Crime than female students. All the other variables did not achieve statistical significance.

Model 2.2

In this model Legitimacy, and Social Cohesion are the key variables. The model explained 2.6% (R^2= .026) of the variance. The model was not statistically significant (F =1.299, *p* = .228). When looking at the significance of the variables, the only variable that achieved statistical significance is gender (b = -.202, *p* = .033). This indicates that on average male students still perceive less General Crime than female students.

Model 2.3

General Attitudes Towards Police, and Perceptions of General Police Effectiveness are they key variables in this model. The model explained 3.4% of variance (R^2= .034). This model was not statistically significant (F = 1.400, p = .162). When looking at the variables none of the variables achieved statistically significance.

Model 2.4

In the fourth model, Specific Attitudes Towards CWU police, and student's perceptions of CWU Police Effectiveness are the key variables in this model. This model was not statistically significant (F= 1.235, p = .255), and only explained 3% of variance (R^2= .030). In the analysis, the only variable that achieved statistical significance was Gender. On average, male students perceived less Traffic Disorder than female students.

Multivariate Models: Alcohol and Drug Disorder

Model 3.1

The Alcohol and Drugs model examines descriptive variables: race, gender, sexual orientation, class standing (first year students, sophomores, juniors), and students who live on or off campus. Overall, this model is statistically significant (F = 3.563, p < .001) and explains about 3.5% of the variance in perceptions of alcohol and drug disorder (adjusted R^2= .035). In this model, two variables are statistically significant: gender and living on or off campus. According to this model, male students perceives less alcohol and disorder crime when compared to female students (b = -.286, p = .002). Additionally, students who live on campus are statistically more likely to perceive more drug and alcohol crime when compared to students who live off campus (b = .272, p = .009). The rest of the variables fail to achieve statistical significance at the p = .05 level. It is evident that gender and living off campus are the key variables in this model. Although, it is important to note that the average value of juniors (which

would be compared to seniors as the excluded group) approaches but does not reach the $p = .05$ statistical significance (b = -.208, $p = .060$), but it may be important in the following models.

Model 3.2

This multiple linear regression analysis examines how students perceive Alcohol and Drugs Disorder on campus. The factors in this model were Contact or no Contact with CWU Police, Legitimacy, and Social Cohesion. The eleven predictors explain 5.6 % of the variance (R^2= .056). Overall this model is statistically significant F = 2.849, $p < .002$. Specifically, the model reveals that gender (b = -.291, $p = .002$) and living on campus (b =. 256, $p = .016$) are statistically significant in this model. On average, male students perceive less alcohol and drug disorder when compared to female students. Also, on average those who live on campus are more likely to perceive more drugs and alcohol when compared to those who live off campus. All the other variables failed to achieve the $p = .05$ level of statistical significance.

Model 3.3

In this model, the analysis examined how students perceive Alcohol and Drugs Disorder on campus when looking at General Attitudes Towards Police, and General Police Factors. The overall model was statistically significant (F = 3.269, $p <.000$) and explains 7.5% of the variance (R^2= .075). In this model gender, juniors, and those who live off campus are statistically significant. Male respondents still perceive less alcohol and drug disorder when compared to females (b = -.254, $p = .006$). Juniors perceive less crime and disorder when compared to seniors (b = -.217, $p = .049$). In addition, those who live on campus perceive more alcohol and disorder than those who live off campus (b = .227, $p =.032$). All other variables failed to achieve $p = .05$ level of statistical significance.

Model 3.4

In this model, General Attitudes Towards police, and perceptions of General Police Effectiveness were excluded and replaced with Attitudes Towards CWU police, and perception of CWU Police Effectiveness Factor. Overall this model explains 5.3% of the variance (R^2= .053), and achieved statistically significance (F = 3.320, p < .000). According to the analysis on gender is still a statistically significant variable. On average, male students still see less alcohol and drugs disorder when compared to female students (b = -.243, p = .009). Juniors was very close to achieving statistically significance (b = -.209, p = .057). All other variables failed to achieve p = .05 level of statistical significance.

Table 15. General Crime Model

Unstandardized Regression Coefficients				
	1.1	**1.2**	**1.3**	**1.4**
Predictor	b	b	B	b
Race	.128	.106	.116	.121
Gender	.007	.009	-.016	-.028
Sexual Orientation	.136	.114	.120	.117
First Year Students	.033	.077	.070	.060
Sophomores	-.079	-.079	-.054	-.031
Juniors	-.008	.010	.032	.025
On/Off campus	-.139	-.127	-.108	-.102
Contact w/ CWU police	____	.065	.064	.074
Legitimacy	____	-.030	.028	.011
Social Cohesion	____	-.090	-.070	-.061
General Attitudes	____	____	-.019	____
CWU Attitudes	____	____	____	.052
General Effectiveness	____	____	-.124	____
CWU Effectiveness	____	____	____	**-.189***

NOTE: *Significant at the .05 Level *p<.05 **p<.01 ***p<.001

Table 16. Traffic Disorder Model

Unstandardized Regression Coefficients				
	1.1	**1.2**	**1.3**	**1.4**
Predictor	b	b	B	b
Race	.103	.082	.099	.089
Gender	**-.203***	**-.202***	**-.232***	**-.221***
Sexual Orientation	-.079	-.102	-.102	-.095
First Year Students	-.226	-.193	-.203	-.206
Sophomores	-.180	-.173	-.161	-.153
Juniors	-.074	-.064	-.053	-.058
On/Off campus	-.068	-.052	-.029	-.035
Contact w/ CWU police	____	-.021	-.019	-.016
Legitimacy	____	-.047	.008	-.026
Social Cohesion	____	-.032	-.014	-.018
General Attitudes	____	____	-.130	____
CWU Attitudes	____	____	____	.005
General Effectiveness	____	____	-.007	____
CWU Effectiveness	____	____	____	-.065

NOTE: *Significant at the .05 Level *p<.05 **p<.01 ***p<.001

Table 17. Alcohol and Drugs Disorder

Unstandardized Regression Coefficients				
	1.1	**1.2**	**1.3**	**1.4**
Predictor	b	b	b	b
Race	.051	.059	.040	.047
Gender	**-.286***	**-.291***	**-.254***	**-.243***
Sexual Orientation	-.225	-.219	-.220	-.260
First Year Students	-.140	-.138	-.127	-.091
Sophomores	-.064	-.076	-.094	-.106
Juniors	-.208	-.201	**-.217***	-.209
On/Off campus	**.272***	**.256***	**.227***	.194
Contact w/ CWU police	____	.132	.129	.117
Legitimacy	____	.031	-.040	-.022
Social Cohesion	____	-.050	-.074	-.079
General Attitudes	____	____	.142	____
CWU Attitudes	____	____	____	.146
General Effectiveness	____	____	.035	____
CWU Effectiveness	____	____	____	-.021

NOTE: *Significant at the .05 Level *p<.05 **p<.01 ***p<.001

CHAPTER V: DISCUSSION

The first research question of this study focuses on how demographic variables play a role in impacting student's perception of crime and disorder. Traditionally, some of the variables in the study have been allocated as control variables. Specifically, the hypotheses associated with this research focus on race, gender, sexual orientation, and living on or campus as central variables that could have an impact on how students perceive crime and disorder.

The findings from this study revealed mixed support for the impact of these variables. In general, the data indicates that gender plays a significant role. Within in the regression model, gender was a statistically significant variable in alcohol/drug crimes, and perceptions of traffic issues. However, it did not play a role in explaining crime in general (General Crime Model). This finding partially supports the hypothesis.

It was also hypothesized that students who live on campus will perceive higher levels of crime and disorder when compared to students who live off campus. In general, college students experience lower crime rates than the general public in the same age group (except for rape), but studies have found that students are still concerned about their safety on campus (Checkwa, Thomas & Jones, 2013; Wilcox, Jordan & Pritchard, 2007). Finding from this study indicates mix support. For the General Crime, and Traffic Disorder factor, there was no statistical difference between students living on or off campus. Although, students who lived on campus perceived higher levels of drug and disorder on campus. It is important to note that class standing of students was not controlled for in these models. This finding is important, a reason why students who live on campus perceive higher levels of crime of drugs and alcohol may be because it is a controlled environment with more supervision, and drugs and alcohol could be easier to detect. Moreover, besides gender and living on or off campus, the other demographic

variables did not have an impact on perceptions of crime and disorder. This is quite surprising since a significant research has found that both race and sexual orientation can play a role in how individuals perceive crime and disorder.

This research also focuses on how theoretical variables play a role in impacting students' perception of crime and disorder. However, other than students' perceptions of CWU Police Effectiveness, no other variable impacted students' perceptions of crime and disorder. These variables were social cohesion global legitimacy, perceptions of general and CWU police effectiveness, and general attitudes and specific (CWU) police. In other research, most of these variables lowered an individual's perception of crime and disorder. However, the findings in this research contradicted most of the hypothesis. For example, it was expected that students who scored high in global legitimacy and social cohesion would perceive less crime and disorder, but in this study these factors did not make an impact.

Another important question was whether perceptions of effectiveness played a role in shaping students perception of crime and disorder. The findings in this study indicated that on average, students' perception of general crime (General Crime model) on campus was impacted by their Perceptions of CWU Police Effectiveness and not the general police. It is important to note that the General Crime factor is made up of the most serious crimes, which includes some of the following crimes: harassing or intimidating, vandalism, and stalking. A possible explanation for this is that students on campus have had or seen positive encounters with the CWU police officers. Encounters with law enforcement may shape student's perception of their police behavior and overall effectiveness (Wilson & Wilson, 2011).

For specific and general attitudes towards police, it was expected that students who had a higher score on attitudes (specific and general) towards police will perceive less crime and

disorder. However, findings from this study indicate that attitudes towards law enforcement do not play a role in shaping students perception of crime and disorder. This finding could simply indicate that regardless of students attitudes towards police, the main focus is on the work that law enforcement officers do in combatting crime.

CHAPTER VI: CONCLUSION

Although there has been an immense amount of research on perceptions of crime and disorder, there are important questions about contributing factors in a different setting about perceptions that have not fully been addressed. To fill this gap, this research examined whether an individual's perception of crime and disorder is mediated through several factors, while also looking at demographic and theoretical variables. Also, since many of the hypothesis was based on previous research on perception of crime and disorder, it was found that some of the findings contradicted other findings on perceptions of crime and disorder.

The variable of gender supported the hypothesis in this research. On average, female students at CWU perceive more alcohol and drugs and traffic issues when compared to male students. In this study, it was not analyzed why women, on average, perceive alcohol and drugs, and traffic issues. However, this research suggests that the average woman perceives more drugs and alcohol crime on campus. It may be that women are more cautious and avoid places were this type of activities occurs. To emphasize, students who lived on campus on average did perceive more alcohol and drugs on campus. Also, when drugs and alcohol are found in one's environment, it is a problem. Not only do students deal with law enforcement, they also have to deal with school officials. In addition, from a theoretical standpoint, it was expected that in a regulated environment on campus students would perceive less alcohol and drug disorder, however, these findings contradict that.

Moreover, women on average perceive more traffic issues than men. The Traffic Model is an interesting variable that is made up of bike, skateboard board, and pedestrian traffic. It is a different type of issue that mainly focuses on traffic on campus rather than criminal behavior. Given this type of issue, perhaps the discovery that women on average perceived more of this

type of disorder when compared to men could be simply by chance. Future studies could focus solely on gender and traffic issues to verify whether traffic issues do in fact impact gender differences on perceptions of crime and disorder.

In this research, it was also surprising that gender did not have an impact on the General Crime Factor. It was expected that the General Crime Factor would be significant since it captures more of the severe forms of crime on campus. In other studies, gender differences did play a role in perceptions of serious crime, women were more fearful or perceived higher levels of crime and disorder in their communities (Franklin & Franklin, 2009; Gainey et al., 2011; Franzini et al., 2008). However, in this study gender was not a predicting variable in general crime.

Moreover, there are various factors that could explain why gender was simply not a predicting factor. For example, CWU is not a place where one sees broken windows, vandalism, or untrimmed trees, and it may be the town is small and few serious crimes happen. The university and the town has a welcoming atmosphere for potential CWU students. In general, one does not perceive crime on campus. In fact, According to City-Data violent crime in 2015 was 82.2% when compared to the United States average 207.7%. Although it is important to note that property crime rate in Ellensburg in 2015 was a little higher at 245.0%, when compared to 220.1% in the United States. Given this information, perhaps in an urban area or a larger university setting gender differences could be a predictor of crime and disorder. Perceptions of CWU police effectiveness in this study was a contributing in reducing student's perceptions of general crime on campus. This is an interesting finding indicating that campus safety and security procedures are working. Campus police officers focus on patrolling campus, which

enables them to provide quicker response time to incidents on campus. This is reflected in our findings and we should continue to improve and expand resources to key campus stakeholders.

The findings in this research could also mean that CWU police are more visible, and more likely to deal with more issues on campus than the general police. In general, students feel that CWU police keeps them safe, help them solve problems, and effectively control crime. Thus, enhancing campus police could decrease other types of crime and disorder, such as traffic disorder and, alcohol and drugs that were not significant in this study. In this study, it is evident that the average students' at CWU view of campus police matters, perhaps if we had a larger sample size, traffic disorder and drugs and alcohol crimes could achieve significance. Also, other studies could analyze larger universities in a different setting to research whether campus police or general police contribute to student's perceptions of crime and disorder, and to what extent. It is crucial that we continue to enhance campus police practices in order alleviate other issues that increase perceptions of crime and disorder in a university setting.

In this study, race and sexual orientation did not have an impact on perceptions of crime and disorder, this could indicate that CWU has effectively promoted equity and inclusivity on campus. There are various clubs, and cultural events that promote respect, and social justice, such as CWU Pride Week, which recognizes LGBTQ students of all race and ethnicities. In 2016, Ellensburg announced their first downtown parade to showcase and celebrate diversity and quality in a conservative area of Washington State.

In this research, CWU's impact on equity and diversity was not analyzed but it could be an explanation on why these demographic variables were not impacted by a heighten perception of crime and disorder on campus. In the future, more data could be gathered over the years to verify that CWU has in fact been successful in promoting diversity on campus. Since, the sample

consisted of 88.9% students who identified themselves as straight, and almost a quarter of the sample were non-white (24.2%). Future research could focus on student's race, ethnicity, and sexual orientation, and their experiences on campus.

CHAPTER VII: LIMITATIONS

Like all research, there were some unavoidable limitations. For one, some questionnaire designed to measure student's perception of crime and disorder could be modified to increase the reliability of responses. Global legitimacy questions contain "positive" wording that easily confuse respondents, especially when they are in a rush to complete the survey (as we all do), for example: "There are times when it's okay to ignore what the police tell you." Another odd and probably unnecessary question was in the social cohesion questionnaire, "very few people know me. This question had a factor loading of .464 which did not load well with the questions measuring social cohesion. Ultimately, questions like these could hinder the detection of expected effects. Therefore, future research may consider the development of more reliable measures to examine theoretical constructs.

While email surveys are easily administered, and cost effective, they do have major drawbacks. In this study, the survey was sent out to about 12,873 students on campus. However, only 5,892 of the surveys were interacted with by the recipient and 655 surveys were completed. Other factors that could have impacted the low response rate of the students is the lack of motivation to respond. Today students are constantly bombarded by messages and surveys could be considered junk mail. In that event, the sample size was small, perhaps with a larger sample size the survey could have produce more significant results.

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