Perceptions of Crime Seriousness and Punitive Attitudes in Post-Secondary Students

by

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A Thesis submitted to the Faculty of Graduate Studies in partial fulfillment of the requirements for the Master of Criminal Justice degree.

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Master of Arts in Criminal Justice

The University of Winnipeg

Winnipeg, Manitoba, Canada

November 2020

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Abstract

Public perceptions of crime seriousness and attitudes towards the punishment of crime stem from the social norms and values that shape society and are informed by ways of knowing about crime. Located within a social constructionist paradigm, the purpose of this study was to examine the influence of post-secondary education, crime type and crime representation on perceptions of crime severity and punitive attitudes for different crime types.

A sample of 971 students from the University of Winnipeg completed an online questionnaire measuring perceptions of crime severity for one-line crime descriptions as well as crime scenarios based on actual court data. Results show that both wrongfulness and harmfulness are strong predictors of perceived seriousness. As predicted, violent crimes ranked highest on measures of seriousness, wrongfulness, and harmfulness, and received the most severe sentencing recommendations. While the level of education completed had no significant difference on perceptions of crime severity, differences between fields of study showed significance. Comparisons between responses to the one-line crime descriptions and the crime scenarios revealed significantly stronger severity ratings for the scenarios than for the one-line descriptions although the ranking of crimes remained similar.

Findings suggest that universal notions of wrongfulness and harmfulness exist that influence perceptions of seriousness and are resistant to change. Perceptions towards crimes are informed by a socially constructed reality of crime that shapes our knowledge of crime. Understanding the underlying factors that influence perceptions and attitudes towards crime may shed new light on the social approaches to dealing with crime and provides new insights into crime control

practices and government crime policy. Finally, results also emphasize the importance of reflecting on the matter of crime representation in academic research.

Acknowledgements

Like the tip of an iceberg, this thesis is the visible part of much larger processes and its success stems from the exceptional support of the many wonderful individuals I was fortunate enough to work with. Without their presence and encouragement this study would not have been possible, and they deserve to be mentioned. First, and foremost, I would like to thank my supervisor, Dr. Michael Weinrath, for his confidence in the success of the project, his time and effort, and his constant support, guidance, and encouragement throughout the process. I would also like to thank my committee members, Dr. Steven Kohm and Dr. Wendy Josephson, for their valuable feedback. Your comments and questions made me think more deeply and critically about certain aspects of this study. Dr. Kohm also deserves recognition for initially suggesting this type of research. I would also like to acknowledge the staff and faculty of the Criminal Justice department at the University of Winnipeg for their dedication towards the program and their encouragement and support.

To my fellow graduate students from the first cohort, Aleks, Kelly and Braeden; I could not have wished for more supportive peers and I will never forget your friendship. I wish you all the best. To my parents and my siblings, thank-you for your support and encouragement, for bearing with me through difficult times, and for helping me reach this milestone. A special thank-you to my dad for his willingness to have conversations about my thesis topic at all times of the day. I value your input.

Finally, I want to say thank-you to the hundreds of students that took the time to complete my survey. Your contribution was critical to the success of this study. Thank-you for making this achievement possible.

I wish to acknowledge that this research is supported in part by funding from the social Sciences and Humanities Research Council.

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Chapter 1. Introduction

Mirage (noun): an optical effect that is sometimes seen at sea, in the desert, or over a hot pavement, that may have the appearance of a pool of water or a mirror in which distant objects are seen inverted, and that is caused by the bending or reflection of rays of light by a layer of heated air of varying density. (Merriam-Webster Dictionary)

It is a familiar tale. The story of a lost, thirsty, desert traveler who looks up to view the tantalizing sight of an oasis only to find it disappearing into thin air. Alas, the expectation of refreshment was founded on a mirage. A mirage and an illusion cannot be conflated to mean the same thing. Whereas an illusion does not necessarily have a basis of reality, a mirage reflects the image of a real object, except in a place where that object does not exist. The illustration of a mirage, as a reflection of reality, can be applied to questions examining the social construction of reality, real social issues, and reflected social beliefs and norms. Crime is one of these social issues, and representations and perceptions of crime are examples of reflective social beliefs.

Crime is a social phenomenon that affects all of us. Social media, local or international media reports on crime, in addition to knowledge about crime obtained through academic literature or personal experience with crime, inform us in different ways about issues of crime. Crime also affects individuals in diverse ways; observing different offences, different criminal actors, and different victims can elicit uniquely different emotions (Bensimon & Bodner, 2012; Herzog, 2003). Furthermore, representations of crime, knowledge of crime, and experience with crime inform and change ways in which individuals perceive and react to crime (Ridener & Kuehn, 2017; Baird et al., 2016; Falco & Martin, 2012; Doob & Roberts, 1984).

Drawing on this, it is impossible to discuss crime and our reaction to crime without considering social norms. Social norms exercise a strong influence on formal and informal ways of crime control. In relation to crime and criminal matters, social norms not only play a significant role in the general determination of what is criminal or not, but also in the social reaction to unacceptable behaviour. This can be through the creation of laws, the establishment of sentencing guidelines, or the various initiatives established to prevent and control crime.

Instrumental in these responses is the level of seriousness attributed by society to the crime.

Perceived crime seriousness, informed by social and moral norms and dictated by our knowledge of crime, influences policy decisions made around crime and criminals (Warr, 1989; Adriaenssen et al., 2018). The impact of perceived seriousness on reactions to crime warrants the exploration of public perceptions of crime seriousness. Given the potential impact of perceptions on policy design, examining changes in perceptions and reasons for perception changes also becomes important.

Perceptions of crime can be said to be socially constructed, or, as Kraska (2006) states, "the result of an intricate process of learning and constructing language, symbols, meanings, and definitions of situations through interacting with other people and through our individual and collective experiences" (p. 179). Therefore, the process of examining perceptions of crime and changes in perceptions and attitudes cannot be done without touching on the representation of crime in society. To inform a research design that examines perceptions and attitudes towards crime, it is important to also engage in a reflection on the representation of crime.

Representations of crime can be understood as creating ways of knowing about crime.

Personal experiences, media reports on offences and academic literature on crime are examples of representations of crime that inform our knowledge of crime and criminals. It is this

knowledge that informs, shapes, and changes perceptions and attitudes towards crime and punishment. Everyone brings into social life his or her own perception of crime based on their knowledge of and experiences with crime. Like a mirage, perceptions of crime that are influenced by representations of offending may reflect only some part of the reality of crime. Furthermore, like a mirage, these perceptions need not be concrete but can change over time through crime representations that challenge existing ways of knowing.

Change in perceptions and attitudes towards crime and punishment may occur through obtaining other knowledge of crime and punishment that conflicts with current beliefs. Sources of other knowledge that challenge existing beliefs can include, among others, personal experience and post-secondary education. This research focuses on perceptions and attitudes towards crime and punishment and the effects of post-secondary education on student perceptions and attitudes towards crime and punishment.

Higher education and exposure to academic research on crime can provide additional knowledge about crime that may bring about changes in perceptions and attitudes towards crime and punishment. However, the relationship between post-secondary education and perception and attitude change is not as straightforward as it may seem. The level of education an individual has may influence attitudes and perceptions, but it is also important to consider the field of study and the type of illegal activity.

Post-secondary education does not necessarily increase knowledge of issues surrounding crime. For example, individuals with a degree in science may not necessarily have changed their ways of perceiving crime simply because their course of study has not exposed them to academic knowledge about crime. Conversely, those enrolled in social science programs such as

criminology, criminal justice, or sociology may find themselves exposed to other truths about crime that may challenge and change pre-existing beliefs.

In addition to the potential influence of field of study, it is also necessary to reflect on the type of crime. Post-secondary knowledge of crime can vary based on the focus of the nature of the program and the courses offered. For example, students majoring in criminal justice may be exposed to knowledge about violent and common street crimes but may not receive as much knowledge on more complex offences such as international fraud or environmental crimes. Conversely, business administration and accounting majors may be more exposed to knowledge on the harms of fraud but might fail to gain more familiarity with violent and common street crimes. Consequently, perceptions and attitudes and any associated change may vary depending on the type of crime. Moreover, changes in perceptions and attitudes cannot be necessarily generalized over all types of crime.

For this reason, it becomes important to examine variation in perceptions and attitudes on crime and punishment depending on the type of offence. It also brings back the question of representations of crime and how offending is represented as a source of knowledge in research. In addition to studying changes in perceptions and attitudes as an effect of post-secondary education, it is essential to explore how the nature of the criminal act may influence perceptions of crime and punitive attitudes towards criminals. Furthermore, in direct relation to conducting academic research on perceptions and attitudes towards crime, in may be beneficial to reflect on the use of crime scenarios versus the use of brief generic crime descriptions in research design as representations of crime that may influence research results on perceptions of crime.

Purpose of the Research

The purpose of this study is to examine how perceptions and attitudes towards crime and punishment differ depending on the nature of the criminal act and whether they change because of higher levels of education, academic knowledge and crime representation. However, this type of inquiry demands a conceptualization of seriousness in perceptions of crime. To achieve this, I will look at undergraduate students' perceptions of crime seriousness and attitudes toward punishment depending on their level of education, area of interest, the nature of the act as well as the perceived wrongfulness and harmfulness of the act.

First, I examine the influence of perceived moral wrongfulness and harmfulness on perceptions of crime severity. Secondly, I investigate whether students' perceptions of crime severity and punitive attitudes will vary for different criminal acts. Thirdly, I examine whether the level of education and the field of study would impact and bring about change in these perceptions and attitudes. Finally, in recognition of the need to reflect on crime representation in academic studies, I explore the impact of crime scenarios as well as generic crime descriptions, as representations of crime, on crime severity ratings. In examining perceptions of crime, I focus specifically on perceptions of offence severity. In other words, how severe do individuals consider different types of criminal behaviour? In conceptualizing seriousness in this study, I draw on prior research indicating that the perceived severity of crime can also be measured by looking at the levels of moral wrongfulness and harmfulness associated with the criminal act (Adriaenssen et al., 2018; Stylianou, 2003; Rosenmerkel, 2001).

Using a quantitative research methodology and drawing on data obtained from an online questionnaire completed by post-secondary students enrolled at the University of Winnipeg, I hypothesize that students' perceptions of offence seriousness and attitudes towards sanctions are

influenced by the perceived levels of wrongfulness and harmfulness attributed to the act. Furthermore, I hypothesize that perceptions of seriousness, wrongfulness, and harmfulness will vary for different criminal acts. In addition, I posit that the level of education and the selected major will impact and change students' attitudes and perceptions of certain crimes and their sanctions. Although my focus is on the relationships between crime type, education level, and perceptions and attitudes of crime and punishment, I will also assess the influence that the representation of crime has on decisions through scenario-based research on perceptions. I put forth the proposition that the method of crime representation in academic research design will impact participant responses and affect measures of crime severity, perceived moral wrongfulness, and harmfulness ratings.

Not only will my research add to the current literature on perceptions of crime seriousness and punitive attitudes among student populations, but it will also provide an insight into the more nuanced and complex interaction of post-secondary education and crime type on perceptions and attitudes and any resulting changes. In addition, it will illustrate the use of a social constructionist approach as well as the use of sociological theory in research measuring social perceptions and attitudes, highlighting the importance of a theoretical framework. This study will also contribute to our knowledge of methodological approaches to the study of crime severity. More specifically, it seeks to provide additional insight into the impact of crime representation by crime scenarios and generic crime descriptions in criminological research on social values and opinions of crime. In relation to this, it will also highlight the need for reflexivity in research seeking to address or investigate social phenomena like perceptions and attitudes towards crime.

In a broader sense, my research will add to the understanding of ways of knowing about crime and how sources of knowledge can determine attitudes and perceptions about offending and, ultimately, decisions about how crime is addressed. It will allow for reflection on the impact of social beliefs and values on social reactions to crime and will help in understanding their influence on the creation of policy and crime control practices. Post-secondary students form the next generation of professionals and policy makers. Examining their perceptions may shed new light on future approaches to crime as these students take their beliefs and attitudes into the workforce.

More concrete knowledge on student perceptions and attitudes towards crime and punishment and the subsequent influence of post-secondary education may inform academic institutions on the need to develop additional courses to generate more knowledge on certain crime types. Knowledge of perceptions and attitudes may also inform professional training practices. Lastly, understanding and reflecting on public perceptions and attitudes towards crime and punishment may lead to more informed crime control practices and government policies.

Providing a Roadmap

To provide a thoughtful and organized approach to describing the study and the results it is beneficial to provide a roadmap and a brief description of the organization of this thesis. A roadmap helps orient the reader as to the layout and makes the research more accessible. For that reason, I will briefly outline what will be discussed in the following chapters.

In chapter two, I will describe the epistemological and theoretical framework in which I situate my research, discuss the matter of crime representation and elaborate on the standards of quality in research that I will commit to. In addition, I will also highlight prior academic research on perceptions and attitudes of crime and punishment and the influence of post-secondary education on ways of knowing. Furthermore, I will also explore literature on crime

representations in survey research using crime scenarios or more generic shorter crime descriptions. Chapter three lists the research questions and hypotheses and describes the research methodology employed including recruitment, sampling, sample description, survey design and data analysis. For the sake of clarity, the results for the four hypotheses are divided into four chapters and discussed separately. In chapter eight, I draw the previous four chapters together and discuss the overall implications of the results both in relation to the topic as well as in the broader social context, illustrating the contributions that the study makes towards academic literature and the creation of knowledge on perceptions and research. In addition, I will reflect on my position as a researcher towards the research and its results and the process of conducting research. Finally, I will highlight the limitations of the study and provide future directions for research, ending with a brief conclusion.

Chapter 2. Theoretical Framework, Core Concepts and Existing Literature

The approach to any academic study of a social phenomenon, like perceptions of crime, is informed by the theoretical approach of the researcher and the existing academic literature on the topic. Theory and existing literature on the matter at hand, influence other aspects of the research process such as the criteria for quality research adopted by the researcher, the concepts employed within the research and the methodology and methods of the study. Theoretical frameworks, core concepts and existing literature can be said to form the base foundations of any academic research. Like any other academic study, my research adopts a certain theoretical framework and refers to existing relevant academic literature in examining how perceptions and attitudes towards crime and punishment differ depending on the nature of the criminal act and levels of education.

This chapter will describe the theory of social interactionism within a constructionist paradigm. Furthermore, I will seek to locate the research approach and my position as a researcher within these adopted epistemological and theoretical paradigms. This will include a reflection of the criteria held for quality research in this project. Furthermore, I will dwell briefly on the matter of reflexivity, how it relates to the research and how reflexivity will be approached. Finally, I will review the existing literature on perceptions and attitudes towards crime and punishment, elaborating on core concepts that are significant for this study as well as touching on the matter of crime representation in academic research.

Theoretical Framework

As Crotty (1998) states, the justification of our choice of methodology and methods can be found in the assumptions of reality we bring into the research. Understanding these assumptions about reality that justify the methodology and methods employed will provide more

meaning and coherence to the research design. Being aware of the theoretical and epistemological perspectives underlying the research design is essential to producing quality research. It is therefore beneficial to describe the epistemological and theoretical perspectives that ground this research on perceptions of crime and attitudes towards punishment. In this study, I focus on social constructionism as an epistemology that informs and is reflected in the sociological theory of symbolic interactionism. In particular, I focus on these paradigms and perspectives because they reflect the assumptions of reality on which I base this study.

Social Constructionism

Social constructionism was first introduced in 1966 by Peter L. Berger and Thomas Luckmann in their book titled *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Berger and Luckmann (1966) argue that human reality should be understood as socially constructed. As an epistemological approach, social constructionism defines the existence of all reality as due to the social actions and practices that are collectively performed and taken for granted (Segre, 2016). Kraska (2006), treating it more as a theoretical orientation, states that within this worldview, reality is considered to be socially constructed and the result of "an intricate process of learning and constructing language, symbols, meanings, and definitions of situations through interacting with other people and through our individual and collective experiences" (p. 179). From a constructionist viewpoint, meaning is constructed differently by different people in different ways (Crotty, 1998). The idea is that there is no objective truth waiting to be discovered.

Perceptions of crime are formed through various ways of knowing. These ways of knowing, in turn, are formed through our interactions with social and personal attitudes, values and norms. Individuals bring into social life their own perceptions of crime based on their

knowledge of and experiences with crime. Perceptions of crime seriousness then, form a multiplicity of realities about crime. Therefore, an investigation of these perceptions suggests a social constructionist approach to research.

The purpose of this study is to explore how knowledge influences perceptions, not to justify perceptions or position any perception of crime as truth. Like a mirage, perceptions of crime influenced by social knowledge of crime, may reflect some part of the reality of crime, but are perhaps not that reality itself. By adopting a social constructionist approach to research, we can come to understand how knowledge influences and changes perceptions. Relevant to this worldview is the theory of social interactionism. Given the nature of the subject and the epistemological stance taken, this research will draw on the theory of symbolic interactionism.

Symbolic Interactionism

Supported by the epistemological paradigm of constructionism, symbolic interactionism is about "those basic social interactions whereby we enter into the perceptions, attitudes and values of a community, becoming persons in the process" (Crotty, 1998, p. 8). Ways of knowing and being are formed through the symbolic interaction of social values, attitudes and norms that shape a person. Symbolic interactionism relates to ways in which perceptions are shaped through representations of crime. These representations of crime can be analyzed by their content, format and context which then informs us of the contextual situations in which we adopt and apply knowledge about crime, offence seriousness, and punishment of crime (Valverde, 2006).

Although the term 'representation of crime' is most often used in relation to culture or popular culture; from a constructionist perspective the representation of crime relates more broadly to the many ways in which we come to understand crime through shared social and individual knowledge and experience with crime and criminal matters. Knowledge can be

obtained from popular culture, from media reports, from academic research or from other sources. Influenced by shared social norms and values, each source of knowledge about crime presents a different way of understanding crime. Indeed, even personal experience with crime is unique to the situation in which it happens and differs depending on the role of the individual within their experience. Within the context of a criminal act, the victim, the perpetrator, the witness and the investigating police officer will experience the same criminal act in different ways.

This knowledge and these experiences all present part of the social reality of crime.

Perceptions of crime and punishment, informed through social interactions, are not based on illusions. The fact remains that crime is tangible and real. However, neither a single source of knowledge nor a single experience with crime can fully and completely define crime. Thus, these sources of knowledge and these experiences with crime, processed through social norms and values, can be seen as representations of crime. Like a mirage, sources of knowledge and experiences form representations of crime, each reflecting some part of the reality of crime. Symbolic interactionism relates to ways in which perceptions are shaped by these representations of crime and, as such, is supported by social constructionism.

Also related to social constructionism and symbolic interactionism is the idea of change. As Berger and Luckmann (1966) point out, "the relationship between knowledge and its social base is a dialectical one, that is, knowledge is a social product *and* knowledge is a factor in social change" (p. 104). If reality is socially constructed and knowledge is formed by social interactions, then change is possible when other sources of knowledge arise that inform our perceptions and perspectives on crime and punishment. Change in perceptions from education and exposure to other knowledge of crime can be problematized through the theory of social

interactions and socialization. Higher education and academic socialization may demand students to consider and write about different aspects of crime as a phenomenon. Exposure to academic representations and knowledge of crime that contradicts existing beliefs can lead to changes in perceptions and attitudes as students attempt to justify the acceptance of new ways of knowing as truth. Since this change is the result of social interaction and the construction of new realities, the theory of symbolic interactionism, grounded in social constructionism, provides a strong framework for exploring and explaining changes in perceptions and attitudes.

Symbolic interactionism requires a reflexivity regarding research design as well. It positions the researcher within the research with the understanding that the relationship between the researcher, the research, and the respondents is a way of interaction that should be considered as well. This brings into question the appropriateness of adopting a quantitative survey design for the purpose of this study. Symbolic interactionism seems to reject the objectiveness of quantitative data and statistical methods, suggesting a more qualitative approach to examining perceptions of crime.

However, Ulmer and Wilson (2003) disagree with these notions and argue that quantitative data and analytic techniques can address core interactionist conceptual concerns including meaning, variation, comparison, situations and contexts. Indeed, they note, for example, that although surveys are limited by respondent's perceptions and interpretation of the questions, nevertheless, they are particularly useful for gaining information about attitudes and beliefs that cannot be measured by outside observation. In addition, care must be taken to acknowledge the context in which such research takes place. As Hayward and Young (2004) state, "quantitative data must be dislodged from claims of scientific objectivity...[and] must be reconceptualized as an imperfect human construction and carefully situated in time and place"

(p. 268). Keeping this in mind, the adoption of symbolic interactionism in this instance can still be justified.

To conclude, perceptions of crime can be best examined through the epistemological paradigm of constructionism. Furthermore, the theory of symbolic interactionism lends itself well to explaining perceptions and changes in perceptions and attitudes. However, the adoption of this theory and worldview also impacts the way research on perceptions of crime should be conducted. Together, the epistemological perspective of constructionism and the related theory of symbolic interactionism informs not only the research design, but also matters regarding criteria for quality in research and reflexivity.

Criteria for Quality

Conducting research on any topic in social science is challenging. It may be safe to say that the goal of any researcher is to present findings that are a contribution in some area to their field of study. The objective then becomes to conduct research of a certain quality and credibility and brings up the issues of designing quality research.

Quality in research design is valuable in distinguishing quality research from the plethora of literature on social research. Multiple criteria have been proposed for both qualitative and quantitative designs. For quantitative research, the common consensus supports validity, reliability, and to some extent, generalizability (Bryman et al., 2008). Other criteria more directed at qualitative research designs include sincerity, worthy topic, rich rigor, credibility, transparency, significant contribution, and ethical and meaningful coherence (Tracy, 2010).

In adopting a constructionist perspective for a quantitative research design, it is necessary to also think critically and be reflexive of one's own position in the research.

Therefore, it is not only possible, but also essential to include criteria for quality that are normative to quantitative research such as validity and reliability as well as criteria for quality

more associated with qualitative research designs such as meaningful coherence and transparency. This study will adhere to the more common principles of validity and reliability as well as meaningful coherence and transparency as criteria for quality in research design. Given the quantitative nature of the research design, measures of validity and reliability will consider internal validity, construct validity, and external validity and reliability as defined by Drost (2011) and Cresswell and Cresswell (2018).

The criteria of meaningful coherence and transparency as defined by Tracy (2010), relates more closely to the epistemological and theoretical assumptions of this research design. Meaningful coherence implies that the methods and representation practices align with the theoretical perspectives endorsed and interconnects all parts of the research process with reviewed literature on the topic (Tracy, 2010). Meaningful coherence provides authenticity to the research and indicates a well thought through research design and a significant connection between the researcher and the research. Meaningful coherence, especially in research addressing ambiguous concepts as are often found in social science research, is crucial to determining quality in research design, be it qualitative or quantitative.

In relation to this, the definition of transparency adopted for this research relates to the openness about the statistical methods used, including any benefits or limitations, and the general transparency of the methodology allowing users to assess the value of the research (Bryman et al., 2008). Transparency is important to quality in research because it controls, to some degree, for the limitations and shortcomings in validity and reliability. It allows for and encourages an honest confrontation with the benefits of the methodology as well as the limitations. It not only provides a greater sense of authenticity to the research, but it allows for self-reflection on my position as researcher and the relationship between the researcher, the research, and the

respondents. As such, it aligns with the idea of social construction and opens up the possibility and need for reflexivity.

Reflexivity

As Finlay (1998) argues, ignoring subjectivity, and thus avoiding reflexive writing, undermines the validity of the research. Furthermore, although the adoption of reflexivity is more common in qualitative research, Ryan and Golden (2006) suggest that incorporating reflexivity into quantitative research designs provides an acknowledgement of and an insight into "the complex dynamics that do exist between researchers and participants in quantitative research" (p. 1194). In relation to the epistemological view adopted in this research, I define reflexivity as an awareness of the relationship between the researcher, the research, the respondent, and the reader. The influence of our own experiences and personal background in the creation of research design, the multi-layered relations between the researcher and the respondents, even in quantitative research, and the relationship between ourselves and the readers of our research are all areas that call for reflexivity (Doucet, 2008).

Despite the quantitative nature of the research design, I seek to be reflexive of each step of the research progress, acknowledging the importance of incorporating reflexivity as part of the research design, to be applied in every step of the process. Although the reflexive voice may be more muted in this type of design than one that incorporated a more qualitative approach, reflexivity will still be embraced to enhance research validity and trustworthiness. Furthermore, being reflexive of my position within the research contributes to a meaningful coherence of the research and connects the methods used to the epistemological and theoretical assumptions on which this research is grounded.

Laying out the epistemological and theoretical framework for this study has allowed for the creation of a strong foundation on which to base my approach to examining perceptions and attitudes to change. It enables me to locate myself as a researcher, within the research. Discussions of criteria for research quality and reflexivity are appropriate here because the choices of criteria one adopts should come forth and be supported by the worldview adopted in the research. Having thus described the base on which this study is positioned, the following section seeks to discuss in greater detail current literature on the topic of perceptions of crime seriousness and punitive attitudes as well as literature considering the representation of crime in academia.

Literature Review

In reviewing the literature to inform and position the research, focus was directed specifically on academic literature that endeavored to define seriousness and examine differences in public perceptions of crime severity depending on the type of offence. Furthermore, a careful review was conducted on academic research that examined the effects of post-secondary education towards punishment. Literature on representations of crime is addressed in relation to the theoretical perspective of social interactionism. It should be noted that literature on fear of crime might have some relevance to this research since fear, although different from perceptions of crime, may be driven by the same underlying factors that inform offence perceptions and attitudes. Nevertheless, for the purpose of this study, review of the literature will be restricted to research relating to perceptions and attitudes of crime and punishment, rather than that published on fear of crime.

Conceptualizing Seriousness

Sellin and Wolfgang's (1964) work entitled *The Measurement of Delinquency* is noted as the landmark study in measuring crime seriousness (Warr, 1989). Using a sample of criminal justice professionals and college students, they obtained seriousness ratings for 141 offences and, drawing on those results, combined the findings into a set of fifteen crime descriptions and their corresponding levels of seriousness (Sellin & Wolfgang, 1964). Following Sellin and Wolfgang's work on perceptions of seriousness, Rossi and his colleagues (1974) set out to develop measures of crime seriousness in support of penal reforms. To determine crime severity, participants were asked to complete a card sorting task by organizing eighty cards each containing a short description of an offence into a box containing nine slots, each slot representing a level of seriousness with 9 being the most serious and 1 being the least serious (Rossi et al., 1974). Both studies succeeded in capturing levels of seriousness for a variety of crimes. However, neither study sought to conceptualize or explain what was to be understood by the notion of seriousness. As a result, while there was some knowledge on the ranking of offence types in regard to perceived seriousness, the question as to what participants used to conceptualize the abstract concept of seriousness was left unanswered.

However, to fully examine perceptions of crime seriousness it is necessary to conceptualize offence severity. To measure levels of seriousness, it is necessary to determine what constitutes severe offending and which factors predict levels of perceived seriousness in relation to crime. Recognizing the need for understanding the meaning of severity in crime perceptions, Warr (1989) first set out to define seriousness. Drawing on survey data from Dallas residents he concluded that seriousness judgments reflect a balance between perceived moral

wrongfulness and harmfulness (Warr, 1989). The exact degree to which each dimension factored into seriousness judgements depended on the nature of the crime (Warr, 1989).

Replicating Warr's research on seriousness, Rosenmerkel (2001) also concluded that both wrongfulness and harmfulness were significant predictors of crime seriousness albeit with differences in the strength of the relationship across offence types. Similarly, Stylianou (2003) examined research on crime perceptions to identify which characteristics of the criminal act predicted seriousness perceptions. He also reviewed the degree of consensus regarding the seriousness of various criminal acts (Stylianou, 2003). According to Stylianou (2003), an empirical generalization could be made from the literature on perceptions of crime severity defining perceived seriousness as a function of two factors: "the perceived consequences and the perceived wrongfulness of the act" (p. 42). He found that the most important characteristic in determining the perceived seriousness of the act was the consequence of the act, i.e., the actual harm that occurred. However, behaviours without direct negative consequences such as so-called 'victimless' crimes could still be perceived as serious based on the extent to which they violated social norms and moral standards (Stylianou, 2003).

These predictors of seriousness seem to have persisted over time. A recent study done by Adriaenssen et al. (2018) examined the concept of severity using differential components of wrongfulness and harmfulness. In defining crime seriousness, they identified the following four components: wrongfulness of crime as defined by the violation of moral norms, the severity of harm, the incidence of crime defined by the frequency of occurrence and the incidence of harms as defined by the frequency of resulting harm from a specific type of offence (Adriaenssen et al., 2018). Respondents selected from the public were asked to consider three scenarios each of violent crime, property crime, and organized or corporate crime (Adriaenssen et al., 2018).

Respondents were requested to rate the four components of crimes seriousness as well as overall seriousness for each of the offences (Adriaenssen et al., 2018).

In relation to the seriousness of crime, the authors found that the public based its perceptions of seriousness primarily on the moral wrongfulness of the act with some emphasis on the severity of harm (Adriaenssen et al., 2018). Contrary to Stylianou's (2003) findings, Adriaenssen et al. (2018) conclude that seriousness ratings are mainly predicted by the perceived moral wrongfulness, suggesting that the public adheres more towards moralism than consequentialism in determining the level of offence seriousness. Nevertheless, despite the differences on the degree of influence each factor has, there is a unanimous agreement that both wrongfulness as well as harmfulness play a significant role in the determination of crime seriousness. Having thus defined to some extent the concept of seriousness, it becomes essential to look at other factors that influence ratings of perceived seriousness of various offences.

Perceptions of Crime Seriousness

In general, the literature points to similar trends in terms of how the public ranks various crimes regarding severity. Rossi and colleagues (1974) found that even though seriousness ratings on average tended to be above the median, crimes against persons, particularly murder, received significantly higher ratings of seriousness than crimes against property. Similarly, in his research, Warr (1989) noted that participants made distinctions among personal, property, and public order offences, rating personal offences as more serious than property offences. In conducting a more in-depth analyses of the concept of seriousness, Warr (1989) also noted that property crimes were viewed as more wrong than harmful to the victim while public order offences were considered less wrong than harmful. Similar to property offences, offences against the person were considered slightly more morally wrong than harmful (Warr, 1989). However,

crimes against the person were still perceived to be much more harmful than property offences (Warr, 1989).

It must be noted that the results from the above-mentioned studies may be somewhat dated. Since then, there have been changes in the social and criminal landscape. One only needs to think of the 21st century war on terrorism or the increasingly prevalent use of internet and technology by both criminals and professionals. Nevertheless, despite the social changes that have occurred since the 1990s, these trends in perceived seriousness towards certain offence types appear to persist.

According to a recent study conducted by Adriaenssen et al. (2018) on perceptions of crime severity, crimes that involved direct physical and psychological harm were deemed the most serious while crimes with no immediate individual harm were considered the least serious. Reviewing academic literature on seriousness ranking, Stylianou (2003) suggests that violent behaviours are generally perceived as the most serious criminal behaviour followed by property offences. Furthermore, O'Connell and Whelan (1996) as well as Stylianou (2003) indicated that there is a relative cross-cultural consensus with respect of crimes ranking high in seriousness which are typically those involving violence and bodily injury. However, offences ranking less serious, such as 'victimless' and culturally specific crimes did not achieve this high level of consensus (Stylianou, 2003).

Stylianou's (2003) findings are supported by prior research done by Rosenmerkel (2001) as well as more current research by Einat and Herzog (2011) and Michel (2016). Einat and Herzog (2011) compared perceptions of seriousness in adults and youth towards violent and property offences to victimless offences and the self-use of illicit drugs. Results indicated that seriousness scores as well as punishment options were significantly higher for violent and

property crimes compared to victimless offences and the self-use of illegal drugs (Einat & Herzog, 2011).

Michel (2016) compared public perceptions of perceived seriousness and punitiveness of violent street crime versus harmful white-collar crime using crime vignettes and subsequent respondent seriousness rates and suggested sanctions. The results indicated that the public as well as students saw violent street crime as more serious and allocated more punitive sanctions towards violent street crime than to white-collar crime (Michel, 2016). It must be noted that Michel's (2016) study did not include a comparison of perceptions for non-violent offences but only highlighted two extremes in immediate harm by comparing violent white-collar crime with violent. However, Rosenmerkel (2001) does emphasize the rating of seriousness for non-violent crime.

Seeking to examine how individuals rated white-collar offences in contrast to other types of crimes, Rosenmerkel (2001) asked U.S. college students in introductory sociology classes to rate 23 types of offences, of which 8 were considered white-collar offences, on perceived seriousness, wrongfulness, and harmfulness. Rosenmerkel (2001) hypothesized that white-collar crimes would be rated less serious than the more common street crimes. Examining the underlying concepts of harmfulness and wrongfulness in determining seriousness, the author also postulated that white-collar offences would be perceived as equally wrong but less harmful than common street crimes (Rosenmerkel, 2001).

Like more recent findings by Stylianou (2003) and Michel (2016), the results suggested that violent crime was considered more serious than white-collar offences (Rosenmerkel, 2001). Furthermore, individuals were more likely to use the harmfulness rather than moral wrongfulness in determining seriousness of white-collar crime. Rosenmerkel (2001) suggests that this may be

since harm, especially physical harm, is more salient to people than the underlying wrongfulness in complex crimes such as corporate crime. However, a word of caution must be added here, given the more recent conclusion of Adriaenssen et al. (2018) finding of the weak relationship between perceptions of immediate harm and levels of total seriousness.

In terms of a more specific ranking of crimes, Rosenmerkel (2001) found that whitecollar crimes were ranked between violent crimes and property crimes in terms of seriousness. These results seem contrary to those of Stylianou (2003) and Adriaenssen et al. (2018) who found that violent crimes were ranked as most serious followed by property crimes with corporate crimes being delegated to the least serious ranking. However, Adriaenssen et al. (2018) point out that when considering the components of crime, assessments of wrongfulness match those of overall seriousness in ranking but the severity of harm assessment saw property and corporate crime switch in ranking with property crime being viewed as less harmful than violent and corporate crime. The ranking of property and corporate crimes varies depending on whether they are assessed as to the level of wrong or harm. Adriaenssen et al. (2018), as well as Rosenmerkel (2001), suggest that this rating may reflect a sense of awareness as to the potential large-scale harm corporate and environmental crime may have due to their impact on multiple victims. Although this seems correct intuitively, research considering only nonviolent financial offences found a curious twist to perceptions of seriousness that suggest the influence crime complexity has on perceived severity.

Examining this relationship, a study by Baird and colleagues (2016) compared perceptions of occupational fraud to non-occupational theft. Recruiting accounting majors, other business majors and law enforcement majors from three university courses, Baird et al. (2016) gave participants eight scenarios, four of which described occupational-related thefts and four

describing non-occupational thefts. To compensate for the influence of loss, all scenarios involved the same amount of financial loss (Baird et al., 2016). The authors hypothesized that ratings of seriousness and harm caused by occupational frauds would be lower than those for non-occupational thefts (Baird et al., 2016). Consistent with their hypothesis, the results indicated that despite similar amounts of loss, students perceived non-occupational thefts as more serious and harmful than occupational fraud (Baird et al., 2016).

However, the study by Baird et al. (2016) also highlights the impact of respondent characteristics on levels of seriousness. It bears some significance to my research in that it used an undergraduate student sample and also sought to compare differences in perceptions by major. Although Rosenmerkel's (2001) study did make use of undergraduate students from an introductory sociology class, one cannot necessarily expect differing results due to the influence of education because the participants were drawn from introductory classes. Furthermore, unlike Baird et al. (2016) Rosenmerkel (2001) did not specifically look at differences in perceptions due to post-secondary education.

Baird and her colleagues (2016) focused in part on how an academic major would influence perceptions of seriousness and harm. The authors hypothesized that accounting majors would rate the seriousness and harm of occupational fraud significantly higher than students with other business majors or those with law enforcement majors (Baird et al., 2016). The results indicated that accounting majors did indeed take occupational fraud more seriously while law enforcement majors considered it the least serious of crimes (Baird at al., 2016). The low levels of seriousness ratings for occupational fraud by law enforcement majors is hardly surprising, considering the significant underrepresentation of white-collar crime in criminology and criminal justice disciplines, as pointed out by McGurrin, Jarrell, Jahn, and Cochrane (2013).

The influence of social and demographic characteristics on crime severity perceptions seems to be somewhat more ambiguous in nature. Rossi et al., (1974) indicated a decreased variability among seriousness scores for individuals according to levels of education. In addition, some difference was observed for gender and ethnicity. More recently, research by Adriaenssen, Karstedt, et al. (2019) indicated some relationship between conservation values, legal cynicism and religiosity and perceived levels of crime seriousness although the impact varies across crime type. In addition, gender seems to have a small but consistent effect on levels of wrongfulness, harmfulness, and seriousness with women giving higher ratings than men (Adriaenssen, Karstedt, et al., 2019). Furthermore, they found that age had a positive impact on ratings for most offences. These findings correspond with those of Vogel and Meeker (2001) who found that men and youth were more lenient than women and older individuals. Higher levels of socio-economic status (SES) and education resulted in lower levels of perceived harmfulness, although these measures were only significant for certain offences (Adriaenssen, Karstedt, at al., 2019).

Vogel and Meeker (2001) indicate that community crime rates and city of residence also impacted perceptions of severity. Interestingly, however, victimization is not always relevant to ratings of seriousness. According to Adriaenssen et al. (2018), "crime victims rank crime seriousness similarly to non-victims and without apparent inflation" (p. 19). However, it must be noted that more recent research has indicated a positive, but small effect of prior victimization on ranking of crime severity (Adriaenssen, Karstedt, et al., 2019).

To summarize the findings on seriousness ranking; the existing literature indicates significant higher ratings of seriousness for violent crimes compared to 'victimless' and non-violent crimes (Rossi et al., 1974; Rosenmerkel, 2001; Stylianou, 2003; Michel, 2016; & Adriaenssen et al., 2018). However, ratings of severity for non-violent crimes and corporate

crimes are less consistent and seem to be influenced by the knowledge of the individual and the complexity of the crime. Furthermore, research has indicated some influence of respondent characteristics such as age, gender, education, and SES on levels of perceived seriousness (Rossi et al., 1974; Adriaenssen, Karstedt, et al., 2019; Vogel & Meeker, 2001). As such it is important to look at possible respondent characteristics that could influence perceived levels of seriousness and to account for these variables when designing research on perceptions of seriousness.

Considering the seriousness ranking of various crimes and the variability depending on the knowledge of the individual it is important to reflect on how these perceptions of seriousness carry over into attitudes towards punishment. For example, more negative impressions will likely result in support for more coercive crime policies.

Attitudes Towards Punishment

The literature of perceived seriousness focused primarily on comparing severity ratings across crime, however, some comparison has been made between measures of seriousness and punishment. There are some common traits when comparing perceived seriousness and attitudes towards punishment. Rossi and his colleagues (1985) examined the relationship between perceptions of seriousness and responses to sanctions using a factorial survey design that created random crime scenarios with subsequent sanctions. Results showed that perceived seriousness had a strong influence on sentencing judgements, especially for more severe crimes (Rossi et al., 1985). However, the researchers also noted that crime seriousness was not the sole determinant in sentencing judgements but that demographic characteristics of the actors also had an impact (Rossi et al., 1985). Despite a notable contribution to the literature, this study has been critiqued by Durham (1986) who felt that the use of a factorial design was problematic due to the creation of unusual vignettes that elicited responses inconsistent with real world judgements.

Regardless of the above critique, more recent findings do reveal similar results that relate further to our conceptualization of seriousness. Roberts and his colleagues (2007) investigated public support for mandatory minimum sentences and found that people endorse the use of mandatory minimums more for the denunciatory rather than the deterrent functions of the penalties. This suggests a link between perceived wrongfulness and attitudes towards punishment. Indeed, Roberts et al. (2007) found that the public overwhelmingly supported mandatory minimums for violent crime and suggest that this may indicate "a link in the public mind between the seriousness level of an offence and the need for a mandatory sentence" (p. 93). Several studies indicate that trends in perceived seriousness across different crime types and attitudes towards punishment are similar. In comparing violent street crime versus harmful white-collar crime, Michel (2016) found that the public allocated more punitive sanctions to violent street crime offenders than to white-collar crime offenders. However, the author did state that the use of different vignettes involving non-violent crime may have resulted in different perspectives (Michel, 2016).

In a similar research design, Schoepfer and colleagues (2007) compared perceptions of punishment between fraud and robbery, using data from a probability sample. Contrary to the findings of Michel (2016), their results indicated that the public believed that both robbery and fraud should receive equally severe sanctions (Schoepfer et al., 2007). However, the authors note the limitations in only comparing robbery and fraud. Finally, Baird et al. (2016) found that students were less likely to report occupational-related fraud compared to non-occupational theft, although this difference was smaller for those with accounting majors. While this does indicate a difference in levels of punitiveness across crime types, it also highlights a possible influence of education and academic knowledge on attitudes towards punishment.

Further evidence of the education-attitudinal link showed that criminology majors held less punitive attitudes towards crime than non-criminology majors (Falco & Martin, 2012; Ridener & Kuehn, 2017; Kuehn et al., 2018). Falco and Martin (2012) compared levels of punitiveness among undergraduate college students majoring in criminology to those majoring in other academic disciplines. Contrary to their hypothesis that criminology students would hold more punitive views, results indicated that criminology students held less punitive views than non-criminology students (Falco & Martin, 2012). Moreover, the findings also revealed that students at higher class levels held lower punitive views than those at lower levels (Falco & Martin, 2012). Notably, the variables fear of crime and prior victimization were not significant in predicting punitive views (Falco & Martin, 2012). This emphasizes the need for a clear distinction between fear of crime and perceptions of crime and punishment. It suggests that although quite similar, fear of crime and perceptions of crime and punishment are not necessarily as related as some might believe.

Drawing on Falco and Martin's (2012) research on punitive attitudes, Ridener and Kuehn (2017) compared levels of punitiveness in criminology and criminal justice majors with non-majors to assess the influence of criminology classes on attitudes towards punishment. The results suggest that being a major rather than mere criminology class attendance influences levels of punitiveness (Ridener & Kuehn, 2017). Students majoring in criminology or criminal justice were less punitive than non-majors despite attending similar courses (Ridener & Kuehn, 2017).

Drawing on their previous study, Kuehn and colleagues (2018) conducted a longitudinal study examining whether college education had an effect on levels of punitiveness, again comparing criminology students with non-criminology students. Consistent with previous research, they found that students' major played a significant role in predicting levels of

punitiveness with criminology students again being less punitive than other majors (Kuehn et al., 2018). Arguably, it could be pointed out that criminology and criminal justice majors most likely have taken more criminology courses than students with other majors and therefore have a deeper understanding of different factors that influence crime that would, in turn, shape different attitudes towards punishment. However, the researchers noted that the results indicated that learning about crime and criminal justice did not contribute to changes in punitiveness suggesting that students enter the criminal justice field of study with pre-set beliefs that are resistant to change (Kuehn et al., 2018).

The authors suggest that one should also consider how student characteristics such as socio-economic status, ethnicity, and political ideology may influence the choice of major and the subsequent levels of punitiveness (Ridener & Kuehn, 2017; Kuehn et al., 2018). Given the impact of respondent characteristics, such as SES, on levels of perceived seriousness (Adriaenssen, Karstedt, et al., 2019; Vogel & Meeker, 2001) the suggestion that it may also impact punitive attitudes bears some validity. Considering this possibility, it is essential to control for those demographic characteristics that can be measured and that may influence perceptions and attitudes towards crime.

To summarize the findings, education seems to have a negative impact on levels of punitiveness in general. However, the effect of education on changes in attitudes towards punishment is most noticeable in students majoring in criminology or criminal justice. Findings on ratings of seriousness as well as punitiveness seem to support the idea that knowledge of crime, obtained through various representations of crime, influences people's perceptions of crime seriousness and their attitudes towards punishment. This brings up the issue of representation.

Representations of Crime

In light of the theoretical base of this research, it is essential to consider representation of crime when assessing perceptions of crime seriousness as well as changes in perceptions and attitudes. Furthermore, not only is it important to consider the influence of representation of crime on existing perceptions of crime, but also how we go about representing crime in research. Reiner (2007) notes that media representations of crime show a clear pattern and a selective bias in terms of how different offenders, victims, and crimes are represented. For example, "crimes of violence are featured disproportionately compared to their incidence in official crime statistics" (Reiner, 2007, p. 383).

Furthermore, in looking at the portrayal of crime by the media, Reiner (2007) points to the tendency to provide brief accounts of selective events with few details and little explanation of possible underlying factors or broader structural processes. Indeed, in regard to seriousness ratings a recent study by Adriaenssen, Visschers, Van den Bulck, and Paoli (2019) showed that exposure to television news had some influence on perceived crime seriousness as well as perceptions of wrongfulness and harmfulness. Reflecting on these results, it may be noted that the selective representation of crimes in the media may influence to some extent perceptions of those who have no other source of knowledge about crime. However, the representation of crime in the media, although being a major source of information about crime, still reflects only one source out of the many sources of knowledge about crime.

Viewed through the epistemological lens of social constructionism, academic institutions and the knowledge that such institutions impart can be said to be influenced by the social construction of reality (Berger & Luckmann, 1966). Certain aspects of crime and certain crime types receive more attention and have a more defined position within social constructs of right

and wrong while other criminal acts are more ambiguous in this respect and therefore, perhaps less likely to be examined. Academic literature, academic programs, academic textbooks, and individual instructors present others with representations of crime that are influenced by global, national, institutional, departmental and individual perceptions on what warrants representation and how. For example, a study by McGurrin et al. (2013) indicated a significant underrepresentation of corporate and white-collar crime in criminology and criminal justice journals as well as undergraduate criminal justice textbooks and doctoral programs. McGurrin et al. (2013) lament this absence, noting that it distorts the representation of white-collar crime in the field and adds to the potential of missing new ways of understanding both white-collar crime as well as traditional street crimes.

Representing Crime in Academic Research

If the representation of crime outside of academic research is important in guiding public perceptions of seriousness and punitiveness, careful representations of crime within research seeking to understand these phenomena is essential. Research on seriousness and punitive attitudes has adopted a variety of methods in representing crime ranging from brief generic one-line crime descriptions (Rossi et al., 1974; Warr, 1989; Rosenmerkel, 2001; Adriaenssen et al., 2018; Adriaenssen, Karstedt, et al., 2019) to full crime scenarios (Rossi et al., 1985; O'Connell & Whelan, 1996; Einat & Herzog, 2011; Baird et al., 2016; Michel, 2016) and even actual criminal cases (Roberts et al., 2007). However, crime scenarios or generic crime descriptions used to measure levels of seriousness are themselves representations of crime. As such it is important to consider the impact of the various ways research has represented crime to elicit ratings of seriousness from respondents. Regardless of the method, each approach has its own benefits and drawbacks.

The use of scenarios or vignettes is praised and supported for several reasons. First, it provides a better method of capturing the complexities of social issues such as crime in a more realistic way (Finch, 1987). Use of a scenario allows researchers to avoid the ambiguity found in the more generic crime descriptions and standardizes "the social stimulus across respondents" (Alexander & Becker, 1978, p. 103). Furthermore, Schoenberg and Ravdal (2000) note that the "vignette approach is an enlightening and mutually creative process for researcher and informant" (p. 71).

Despite this, the creation of scenarios runs the risk of introducing researcher bias in addition to facing the difficultly of obtaining a representative sample of crime events (Lynch & Danner, 1993). To solve this problem, some researchers have adopted a factorial approach to developing crime scenarios that would capture all possible combinations of a criminal event (Rossi et al., 1985). This approach is not without problems and has been critiqued for creating unrealistic scenarios and failing to develop a representative sample of crime scenarios (Durham, 1986). Furthermore, the use of a more detailed scenario also affects the generalizability of the results to a general crime category (Adriaenssen et al., 2018). In addition, there exists the possibility of introducing confounding variables when using more descriptive crime scenarios.

Indeed, descriptions of the perpetrator, victim(s), and the circumstances of the crime can impact perceptions of seriousness regarding the actual crime itself. For example, Vogel and Meeker (2001) found that younger respondents perceived crime less serious than older respondents if the offenders in the crime scenarios were perceived as being young. Likewise, Bensimon and Bodner (2012) found that the age of the victim as well as the offender influenced evaluations of both the severity as well as the punitiveness of offences.

In relation to offender ethnicity in crime scenarios, Herzog (2003) found a "cross-ethnicity" effect in which offences in which the offender was of different ethnicity than respondents were perceived as significantly more serious compared to those committed by an offender of the respondent's own ethnic group. Finally, research by Doob and Roberts (1984) indicated that individuals presented with more information about a particular criminal case tend to be more lenient towards sentencing.

Despite these results, the exclusion of characteristics and the use of generic one-line crime descriptions is by no means more ideal. Indeed, Lynch and Danner (1993) note that the use of generic crime descriptions encourages 'fill in the blanks' behaviour, meaning that participants will formulate their own ideas regarding offence, offender and victim characteristics to guide their decisions on severity and punishment. Rather than being able to control for confounding variables by standardizing them, the one-line crime descriptions offer no option for dealing with this type of within group variability.

The approach for some researchers to deal with these problems has been to add some detail to the crime but stop short of contributing specific characteristics. Adriaenssen et al. (2018) recognized the risk of letting respondents 'fill in the blanks' but wanted to avoid creating scenarios that would be too specific in nature. Instead, they provided brief descriptions. For example, their scenario for theft was described as "a person intentionally steals another person's properties" (Adriaenssen et al., 2018, p. 8). Although this approach offers participants more than just the word 'theft' it is difficult to see how a longer description without more specific context would be much different from just asking participants to rate theft.

Roberts and colleagues (2007) offer a much more realistic approach by using summaries of actual court cases to measure public attitudes towards sentencing. This approach minimizes

the risk of presenting unrealistic scenarios as produced by factorial designs. Furthermore, in terms of measuring public attitudes towards sentencing, the use of actual cases with real world sentencing offers a much more realistic perspective of public opinions towards current sentencing protocols and guidelines. However, the more specific nature of this approach makes the generalization of findings to a more general crime type more difficult.

These issues and findings emphasize the need to consider representations of crime within research on perceptions of crime as well. In line with the epistemological and theoretical approach to this study as well as the adopted criteria for quality, examining how ways of knowing about crime influence one's own research design is essential. Adopting a social constructionist viewpoint while ignoring the importance of reflecting on representations of crime within the research design would result in a discordance with the epistemological viewpoint this research takes. Failure to consider the representations and the ways of knowing that are represented by the research design would also violate the criteria for quality that was adopted. Thus, it is necessary to not only describe the theoretical framework and the existing literature on which this study is based, but also to relate the research design back to these foundations.

Chapter 3. Research Questions and Methodology

The previous chapter contemplated the epistemological and theoretical foundations that justify research on perceptions of crime and the corresponding criteria for quality. In addition, I reviewed both the existing literature on perceptions of crime and attitudes towards punishment and addressed matters relating to the representation of crime. In this chapter, I will now elaborate on matters regarding the design of this study, the methodology employed, as well as the methods adopted in data analysis. This chapter clarifies in greater detail the objective of the research, the research questions I seek to answer, and the hypotheses I wish to test. In addition, I will also discuss the methodology used in this study, outlining recruitment and sampling procedures and describing the sample participants, discussing survey and scenario design and implementation, and, lastly, approaches to data analysis.

Research Hypotheses

Predictors of Seriousness

In conceptualizing seriousness in perceptions of crime, Warr (1989) first introduced the notion that judgements reflected a balance between perceived moral wrongfulness and harmfulness. Research following Warr's (1989) landmark study supports this idea with results showing that both notions of moral wrongfulness as well as direct physical harm contribute significantly to informing perceptions of seriousness (Rosenmerkel, 2001; Stylianou, 2003; Adriaenssen et al., 2018). The degree to which each factor influences perceived seriousness has been a matter of debate with some stating that the level of harm is the greater predictor (Stylianou, 2003) while other researchers claim wrongfulness is key (Adriaenssen et al., 2018) and still others suggest that the degree of influence is determined by the type of crime (Warr, 1989).

For this study I will examine the influence of perceived wrongfulness and harmfulness on perceptions of seriousness for each crime description and scenario. Considering the significant amount of research already dedicated to the matter, it may seem somewhat redundant to repeat this type of investigation by asking how much influence perceptions of wrongfulness and harmfulness have on seriousness ratings. However, understanding the influence of wrongfulness and harmfulness on the seriousness ratings for the representations of crime particular to this study allows for a deeper understanding of the results and the influence of educational and demographic factors. In line with the existing literature on the subject, I expect that both wrongfulness and harmfulness will significantly impact seriousness ratings. However, the degree of influence for each factor will be dependent on the crime in question.

Hypothesis 1: Both moral wrongfulness and perceived harmfulness will predict perceived seriousness ratings to different degrees depending on the crime.

Perceptions of Seriousness and Punitiveness

Prior research has overwhelmingly indicated that the public rates crimes that involve direct physical and psychological harm such as violent crimes, as more serious compared to property and white-collar crimes (Rossi et al., 1974; Warr, 1989; O'Connell & Whelan, 1996; Rosenmerkel, 2001; Stylianou, 2003; Einat & Herzog, 2011; Michel, 2016; Adriaenssen et al., 2018). Furthermore, research has also indicated that there is a relative cross-cultural consensus with respect to crimes rating high in seriousness which were typically those involving violence and bodily harm (O'Connell & Whelan, 1996; Stylianou, 2003).

In relation to the influence of crime type, I ask: Will students' perceptions of crime severity and punitive attitudes vary for different criminal acts? Drawing on research by

O'Connell and Whelan (1996) as well as Adriaenssen et al. (2018), I propose that crimes with higher ratings of seriousness will have a higher level of consensus on moral wrongfulness and higher levels of perceived harmfulness. Mean severity ratings of violent crimes will be significantly higher than that of non-violent hate crimes, property crimes, or white-collar crimes. Furthermore, crimes with higher ratings of seriousness will have a higher level of consensus on moral wrongfulness and higher levels of perceived harmfulness.

Studies on perceptions of seriousness have primarily compared measures of wrongfulness and harmfulness for violent, property and white-collar crimes (Warr, 1989; O'Connell & Whelan, 1996; Rosenmerkel, 2001; Stylianou, 2003; Adriaenssen et al., 2018). In this study, I also wish to compare perceptions of hate crimes. While not necessarily having a direct physical impact on the victim and thus perhaps rated lower on measures of harmfulness, hate crimes would be expected to elicit some sense of moral wrongfulness. In relation to this, this study examines whether hate crimes would be considered more serious than property crimes and would result in higher ratings of wrongfulness. It is expected that while initially non-violent hate crimes and white-collar crimes would not be considered as more serious than property crimes, these ratings may change as education level increases.

Hypothesis 2: Participants will rate violent crime as more serious than non-violent hate crimes, property crimes, and white-collar crimes and crimes with higher levels of seriousness will show less variability in scores.

Post-Secondary Education and Change

In line with a constructionist worldview and the theory of symbolic interaction, I expect seriousness ratings of certain crimes to change as students are exposed to additional knowledge

about criminal offences that may challenge pre-existing perceptions. For example, students may become more sensitive to the harmfulness and wrongfulness of non-violent hate crime. They may also come to view property crimes as less serious as they learn about the deeper social problems that drive some of these particular offences. In addition, consistent with the findings of Adriaenssen, Karstedt, et al. (2019) students with higher levels of education may perceive certain crimes as less harmful as they gain new perspective of the harmfulness of other offences.

Furthermore, in agreement with the above-mentioned theoretical approach, prior studies have indicated that students at higher class levels hold lower punitive views than those at lower levels (Falco & Martin, 2012).

The effects of education level will be further enhanced by the field of study students are enrolled in. Students in social sciences and humanities will arguably be more exposed to academic knowledge of crime than those students enrolled in sciences. Furthermore, prior studies have indicated the influence of academic major on students' perceptions of crime seriousness (Falco & Martin, 2012; Baird et al. 2016; Ridener & Kuehn, 2017; Kuehn et al., 2018).

Regarding the influence of post-secondary education on perceptions and attitudes towards crime, I pose the following research questions. Firstly, does the level of education impact these perceptions and attitudes? Secondly, does the field of study impact these perceptions and attitudes?

Based on the results from prior research, I posit that mean levels of seriousness from different crime types will differ between lower and higher levels of education. Furthermore, I expect that participants' field of study will enhance these effects. Change in mean levels of seriousness for different crime types will be greater for those in social sciences, particularly for criminal justice students, followed by business administration, humanities, and sciences. The

exception for this will be white-collar crime, in which I anticipate the change in seriousness ratings to be greatest in business administration students. In relation to levels of punitiveness, I posit that mean levels of punitiveness will differ between lower and higher levels of education and that, in general these ratings will decrease as education increases. Furthermore, I posit that change in mean levels of punitiveness for different crime types will be greatest in social science and criminal justice majors.

Hypothesis 3: Students with higher levels of education will rate certain crimes differently and hold less punitive views than those with lower levels. This difference will be enhanced by the participants' field of study.

Representation of Crime

Studies examining perceptions of crime seriousness have employed both generic one-line crime descriptions (Rossi et al., 1974; Warr, 1989; Rosenmerkel, 2001; Adriaenssen et al., 2018; Adriaenssen, Karstedt, et al., 2019) as well as detailed crime scenarios (Rossi et al., 1985; O'Connell & Whelan, 1996; Einat & Herzog, 2011; Baird et al., 2016; Michel, 2016) and even actual criminal cases (Roberts et al., 2007). No method of representation is perfect. The use of crime scenarios has been critiqued for failing to capture a more general crime type (Adriaenssen et al., 2018) and for presenting unrealistic case studies when created using a factorial design (Durham, 1986). Furthermore, Lynch and Danner (1993) note that one-line descriptions suffer from 'filling in the blanks' behaviour and a priori assumptions in which respondents make assumptions about the variables surrounding the crime (Lynch & Danner, 1993).

Some researchers have acknowledged the problem and sought to find a middle ground by creating sentence length crime statements that are still devoid of situational characteristics (see

Adriaenssen et al., 2018). However, the resulting scenario seems to be little better than the simple mention of a crime type. In most instances, the choice of using crime vignettes versus generic one-line crime descriptions is made without thoroughly considering the impact these different designs may have on seriousness ratings and the generalizability of the study to other research results. In response to this lack of consideration, I ask: do the different representations of crime in research on perceptions of crime, significantly impact participant responses to survey questions regarding severity, harmfulness, and wrongfulness? To put it simply, can one reasonably compare the seriousness ratings given in response to a generic description of a certain crime to that given in response to a more detailed scenario of that same crime without considering the difference in representation? I posit that the method of crime representation does significantly impact participant responses on perceived severity. In relation to this, I argue that the mean rate of seriousness for one-line crime descriptions will differ compared to the seriousness ratings of detailed offence scenarios.

Hypothesis 4: Students will rate the severity of the offence differently when they consider generic one-line descriptions of crime compared to detailed scenarios.

To summarize then, the purpose of this study is to investigate the effects of crime type and post-secondary education from a social constructionist worldview. Consistent with the adopted epistemological and theoretical approaches, I also incorporate a reflection on the representation of crime in research examining perceptions of crime. Having thus outlined the research objectives, I will now discuss in greater detail the methodological aspects of this study.

Methodology

To compare and measure changes in perceptions and attitudes, I employed a quantitative cross-sectional survey design, recruiting student participants from the University of Winnipeg to complete an on-line survey on perceptions and attitudes towards crime. Online surveys provide a relatively easy, cost-effective and anonymous way of reaching participants. From an ethical perspective and depending on the design of the instrument, the use of an online questionnaire ensures the anonymity of participants. Indeed, in some instances, a survey design provides a way of researching concepts and accessing information that may be difficult to obtain through other means. Keeping in mind the limitations of a survey design, Ulmer and Wilson (2003) point out that within a symbolic interactionism perspective, anonymous surveys provide an opportunity to gain information that individuals may be hesitant to discuss openly.

As mentioned previously, this research adopts a cross-sectional survey design. Compared to longitudinal research, the use of cross-sectional survey designs has been critiqued on issues of validity, particularly in regard to the common method variance and causal inference, or the ability to infer causation (Rindfleisch et al., 2008). Common method variance in cross-sectional surveys, also known as common method bias, can occur when measures for both the independent and dependent variables are obtained from the same respondent (Podsakoff et al., 2003).

Referred to as common rater effects, the use of a single rater can result in unintended covariance between variables (Podsakoff et al., 2003). For example, responses to certain questions may influence the way participants respond to the following questions. Podsakoff et al. (2003) mentions, among other causes of artificial covariation, the possibility of a consistency motif referring to "the propensity of respondents to try to maintain consistency in their responses to questions" (p. 881).

However, despite this, longitudinal studies are not necessarily perfect, demanding a significant time frame to be conducted in a proper way and struggling with respondent attrition and potential intervening events (Rindfleisch et al., 2008). Furthermore, research by Rindfleisch and colleagues (2008) indicates that a well-designed cross-sectional survey can mitigate these concerns and be an adequate substitute for a longitudinal design, particularly when the sample consists of "highly educated respondents, employ[s] a diverse array of measurement formats and scales, and...[is] strongly rooted in theory" (p. 276). The reason for adopting a cross-sectional approach in this study was primarily due to time constraint. Furthermore, this approach was also selected to mitigate and avoid the issues present in longitudinal designs relating to respondent attrition due to student participants graduating and the possible effect of intervening events, particularly considering the topic of this study.

Sample Selection and Recruitment

To determine the influence of post-secondary education on perceptions of seriousness and punitive attitudes towards crime, undergraduate and graduate students were recruited at the University of Winnipeg using convenience sampling. Located in downtown Winnipeg, Manitoba, the University of Winnipeg currently enrolls 9684¹ students according to the most recent statistics reported by the university's office of institutional analysis (The University of Winnipeg, 2019). This includes 9415 undergraduate students as well as 269 graduate students (The University of Winnipeg, 2019).

The target population for this study included full-time, part-time, international, and domestic students. To participate in the study, students needed to be enrolled in at least one course at the University of Winnipeg. This selection criterion was justified due to the nature of

¹ Count as of November 1, 2019.

the research objectives. To measure perceptions of crime seriousness and punitive attitudes in post-secondary students and compare changes in perceptions and attitudes, participants needed to have some post-secondary education or be starting post-secondary education. The purpose of this study was to measure the change in perceptions and attitudes because of exposure to academic ways of knowing about crime. To obtain a significant measure of these changes, it was necessary to know what perceptions and attitudes students have coming into post-secondary education. By measuring the attitudes and perceptions of incoming students and comparing them to measures of attitudes and perceptions in more advanced students, it became possible to capture the effect of post-secondary education on perceptions of crime and attitudes towards punishment.

In relation to this, the exclusion of participants that were not currently enrolled in post-secondary education although having had prior post-secondary education was also justified by the research objectives, as well as through the worldview and criteria for quality adopted by this research. Inclusion of individuals that have had post-secondary education may bring in the effects of expertise and working knowledge that would affect the validity of the research. Arguably, those enrolled in post-secondary courses could still have professional experience that might have influenced the results. However, by excluding those not enrolled I attempted to control for this possibility.

In addition, post-secondary students enrolled at different institutions, but not at the University of Winnipeg were excluded for two reasons. First, these students were excluded due to the limited time frame in which this study was conducted and the potential difficulties in accessing students from different institutions. Secondly, including students from other institutions could have potentially impacted the internal validity of the study. In relation to comparing the effects of selected major, different institutions might have different requirements

and different course selections that would influence perceptions of crime seriousness and punishment in different ways. Inclusion of students from different institutions would have added an additional level of complexity to the design without improving validity and generalizability.

In recruiting participants, this study drew from the methods used by Petersen and Ford (2018) in their study on conflict management in business students. Employing a questionnaire design, the authors invited students to participate in the online survey through departmental student email lists, email invitations through student offices, and notices on student group social media sites (Petersen & Ford, 2018). The benefit of this method of recruitment was that participation was anonymous and outside of class time, thereby preventing threats to voluntary consent (Petersen & Ford, 2018).

Following the approach used by Petersen and Ford (2018), an invitation email containing a description of the research and a link to the online survey was distributed by the University of Winnipeg's Office of Institutional Analysis to the University of Winnipeg student email list.

Using the University of Winnipeg student email list and depending on the Office of Institutional Analysis as intermediary safeguarded the anonymity of participants while at the same time ensuring a maximum number of potential participants were reached. Furthermore, the role of the Office of Institutional Analysis in the institution was sufficiently removed from potential participants to ensure voluntary participation.

Besides the distribution of the invitation email, promotional posters were distributed on campus at the University of Winnipeg. These posters described the research and offered students the opportunity to participate in the study by following a QR code embedded in the poster. It must be noted that the invitation email proved to be the most efficient way of recruitment.

Indeed, response data results indicated that none of the participants accessed the survey via the

QR code. However, part of this may have been caused by the fact that shortly after the distribution of the survey all campus buildings were closed due to the rise of COVID 19 in March 2020.

To encourage students to participate in the study an incentive was used. Students who decided to participate in the study were offered the opportunity to enlist in a draw for one of three \$100 Amazon gift cards by entering their email address. To ensure anonymity, contact information for the draw was collected separately from the survey data and destroyed once the winning participants were selected. Finally, to ensure that the targeted sample population was reached, those agreeing to complete the questionnaire were asked to specify if they were currently enrolled in a course at the University of Winnipeg. Participants who responded negatively to this question were thanked for their contribution and screened out of the questionnaire.

Online Questionnaire Design

For this study, a questionnaire was designed and distributed via Qualtrics, an online survey platform. The complete questionnaire can be reviewed in Appendix A. The survey was distributed during the first three weeks of March 2020. To encourage participation, a follow-up email was distributed 10 days after the initial email invitation. As Fan and Yan (2010) have noted in their review of the literature, there is a consistent effect of reminder emails on survey response rates.

Online surveys, although having lower response rates than traditional computer-assisted telephone interviewing (CATI) in some instances, are also more cost effective and easier to implement (Lee, Kim, Couper & Woo, 2019). Fan and Yan (2010) note that in some instances, the use of on-line surveys can be an issue when the target population might include individuals that may not be as comfortable with newer technology or those with no internet access. This

could potentially result in a biased sample. However, in this case, considering that the target population consists of university students, I assumed that access to internet and knowledge of technology would not present a significant issue. More specific to this study, the use of online distribution proved to be of significant benefit for the success of the study as the rise of COVID 19 in March 2020 resulted in the closure of the University of Winnipeg campus during the second week of survey distribution. Although it cannot be stated with certainty, this event would most likely have greatly impacted the number of participants that could have been reached if a different method like an in-person distribution of paper surveys had been adopted.

Reviewing the literature on web survey response rates, Fan and Yan (2010) remarked that response rate is significantly influenced by factors such as topics, length, ordering, and format. For example, research indicated that a completion time of thirteen minutes or less is considered the ideal length for optimal response rate (Fan & Yan, 2010). Another influential factor in response rate is how easily participants can access and open the web survey (Fan & Yan, 2010). Fan and Yan (2010) suggest implementing pilot studies that will identify complex or poorly worded questions and formatting errors as well as highlight any issues with accessing the web survey platform. Furthermore, it is important to ensure that the format of the collected survey data can be used directly for data analysis in data analysis software, such as SPSS (Fan & Yan, 2010).

Although a pilot study was not implemented in this case, the use of Qualtrics mitigates some of these issues. Besides access to the survey by computer, Qualtrics surveys are also compatible with mobile phones. Furthermore, in addition to providing easy access and being relatively user friendly, Qualtrics collects survey responses in a format that can be directly transferred into SPSS for data analysis. Furthermore, the software allows the researcher to test

the questionnaire to ensure the proper collection of data and review the format of the survey as the participant would view it prior to distribution. Drawing on this option, multiple test runs were conducted to ensure the proper collection of data and to correct any formatting errors or issues with accessing the survey itself.

The questionnaire was divided into three sections. In the first section, participants answered questions related to educational variables. The second section provided participants with crime descriptions and scenarios and asked participants to rate them on perceived levels of seriousness, wrongfulness, and harmfulness in addition to answering questions surrounding the appropriate sentence for each scenario. The third section of the survey asked participants to answer some brief questions regarding demographic characteristics and potential prior victimization.

Ulmer and Wilson (2003), in discussing the relevance of quantitative research within symbolic interactionism, note that the limitations of survey designs using questionnaires are mostly related to the honesty and the accuracy of respondents' reporting. They point out the need to acknowledge the fact that survey questions are subject to the respondent's perceptions, hence the need to ensure that survey questions accurately represent the concepts under investigation (Ulmer & Wilson, 2003). Drawing on research done by Redline (2013), I ensured that the conceptions of seriousness, wrongfulness, and harmfulness were clarified by providing definitions and instruction on how to answer questions prior to the question. Furthermore, to reduce the issue of ballot stuffing, an option was selected using the Qualtrics platform that prevented participants from taking the survey more than once. In addition, to reduce the amount of unexplained missing data and incomplete responses, the survey was designed in such a way that participants were forced to select a response to each question in a section before moving on

to the next section. Participants who did not feel comfortable with answering questions related to education, demographic characteristics or victimization were offered the option to select "Choose not to answer".

Variables

Selection of Crimes. Consistent with prior research approaches, crime descriptions and scenarios included crimes against a person, property crimes and fraudulent acts. In response to the fourth hypothesis, both generic crime descriptions as well as more substantial scenarios were used. Participants were provided with four crime descriptions and four crime scenarios depicting fraud, hate crime, assault, and break and enter.

One-line descriptions simply stated a crime and directed participants to rate the perceived seriousness, wrongfulness, and harmfulness. For example, for hate crime, the generic description simply stated, "hate propaganda" followed by the question "On a scale of 1 to 10, rate the perceived level of seriousness of aggravated assault". The crime scenarios, however, included a description of the criminal charge, the circumstances of the event and the subsequent sanction the offender received. These scenarios were followed by the same questions on seriousness ratings.

In creating the larger scenarios, I followed the approach of Roberts and colleagues (2007) who illustrated the effectiveness of using actual court case descriptions as crime scenarios in research examining punitiveness. In addition to the ease of accessing scenario examples and the possibility of selecting for specific crimes, the use of legal case descriptions also limited researcher influence in the creation of simulations and provided a perhaps more unbiased, realistic and factual description of crime in addition to reflecting actual punitive measures. The

following is an example of a fraud offence scenario used in the survey that was based on the case *R. v. Paterson*:²

"Mr. P has been charged for committing fraud in excess of \$5000 by falsifying gold assay data results in relation to a mining resource project. Mr. P defrauded members of the public who sought to buy shares in S.R. Corp, and defrauded S. R. Corp of services and capital. Total estimated loss for S. R. Corp. has been calculated to be many millions of dollars. In addition, corporate investors have also reported significant loss that in some instances affected the quality of life. Mr. P was sentenced on four counts of fraud for an imprisonment of 6 years, sentences to be served concurrently. In total, Mr. P will have to spend 6 years in prison."

Using both one-line descriptions as well as complete crime scenarios allowed, to some extent, for the quantification of the impact of scenario characteristics while accounting for the 'filling in the blanks' behaviour. Generic crime descriptions result in severity ratings that are informed by the participant's own mental image of the crime, the victim, the perpetrator, and the circumstances. A more detailed scenario seeks to reduce variation in seriousness ratings by controlling for these factors.

Drawing on this, the placement of the scenarios in relation to the generic crime descriptions became important. Exposing participants to a more descriptive version of the crime type could results in a carryover effect on the way participants reacted to the generic crime descriptions. This would impact any comparisons made between the two methods of crime representation. To avoid a carryover effect, the questionnaire presented participants with the generic crime descriptions prior to exposing them to the crime scenarios. Furthermore, to avoid order effect in which exposure to the previous description or scenario may influence perceptions of the following description or scenario, the order in which offences were presented varied across participants. While not directly relevant to measuring changes in seriousness as a result of

² Full descriptions of all four scenarios can be see in the survey instrument in Appendix A.

education, this approach provided some reflection on the use of scenarios in criminological research and addressed my fourth hypothesis regarding crime representation in academic research.

Dependent variables. Survey participants were instructed to rate the level of perceived seriousness, wrongfulness and harmfulness and the appropriateness of the sanction. Perceptions of severity were measured using a 10-point Likert scale and punitive attitude was measured using a 5-point Likert scale. Following the research done on the measuring of severity (Warr, 1989; Rosenmerkel, 2001; Stylianou, 2003; Adriaenssen et al., 2018), the perceived seriousness of crime was defined by the moral wrongfulness and harmfulness of the act. Perceptions of wrongfulness and harmfulness were analyzed as predictors of severity ratings for my first hypothesis but treated as dependent variables when examining for changes in perceptions due to education, demographic variables, and crime representation.

In defining wrongfulness, participants were instructed to consider how morally wrong the behaviour was. In defining harmfulness, participants were asked to consider the level of harm resulting from the crime. After reading the offence description or scenario, participants were asked to rate the perceived level of seriousness on a scale of 1 to 10 with 1 being "not serious" and 10 being "very serious". Following this, participants were asked to rate the perceived wrongfulness of the act, as defined previously, on a scale of 1 to 10 with 1 being "minimally wrong" and 10 being "very wrong". In addition, participants were asked to rate the level of harm generated by the act on a scale of 1 to 10, with 1 being "not harmful" and 10 being "very harmful".

Following the literature on crime severity, seriousness is conceptualized and determined by the moral wrongfulness and the physical harmfulness of the act. Nevertheless, asking

participants to rate the overall seriousness of the offence prior to rating the wrongfulness and harmfulness of the act serves two essential purposes. Firstly, measuring rates of overall seriousness as well as wrongfulness and harmfulness allowed for a comparison between overall seriousness and wrongfulness and harmfulness. This comparison demonstrated how measures of wrongfulness and harmfulness predict measures of seriousness and the extent to which each component impacts measures of severity.

The second reason for asking participants to rate overall seriousness first was to stimulate their thought process on the severity of crime and to prepare participants to rate wrongfulness and harmfulness. Rating the wrongfulness and harmfulness of the offence would act as an explanation for the previous severity ratings. Thus, by asking participants to rate overall seriousness first, I reasoned that the questions regarding the moral wrongfulness and harmfulness of the offence became more meaningful.

To measure punitive attitudes, participants were asked to reflect on the sanction meted out to the offender and consider whether the sanction was appropriate or whether it should be lighter or harsher. Using a five-point Likert scale, participants were asked to indicate whether the sanction for the offence described in the crime scenario should have been "very much lighter", "somewhat lighter", "about the same", "somewhat harsher", or "very much harsher". Participants who held more punitive attitudes would be more likely to state that the sanction should have been harsher whereas participants with lower punitive attitudes would state that the sanction was appropriate or should have been lighter.

Independent Variables. For this research, independent variables included the type of crime, crime representation, education level, and field of education. Crime type consisted of the four different crime categories consisting of violent, property, non-violent hate, and white-collar

crime. In the questionnaire, these crime types were specified as assault, break and enter, hate propaganda, and monetary fraud exceeding one million. Crime representation was divided into two categories consisting of generic one-line descriptions and crime scenarios.

Collecting information on both the level of education as well as participants' field of study enabled me to measure for the effect of education on perceptions of crime by comparing first-year student to more advanced students while controlling for different fields of study. For the purpose of this study, participants' level of education was measured in three ways. First, participants were asked to indicate the number of years they had received post-secondary education ranging from less than 1 to 5 or more. Secondly, they were asked to provide an estimate of the number of credit hours they had completed. Thirdly, participants were asked to indicate a credit hour range matching the number of credit hours completed. Ranges consisted of 0 to 30 credit hours, 31 to 60 credit hours, 61 to 90 credit hours, and 90 or more credit hours. In addition, participants were also asked to indicate their student status as a full or part-time graduate or undergraduate student.

This approach to measuring participant education level in multiple ways is beneficial in correcting and controlling for missing values. For credit hour estimates, where possible missing values were filled using the midpoint of the range indicated by the student. If neither credit hours nor credit hour range were reported, an estimate would be created based on the status indicated by the student. Due to the survey structure, graduate students were not required to answer these questions. However, to include them in the analyses, graduate students were placed in the highest credit hour range based on the assumption that as graduate students they would have already completed that amount of credit hours during their undergraduate years. For the analyses conducted in this study, credit hour range was used as a measure of education level.

In addition to the level of education, participants were also asked to specify their selected major(s). These majors were divided into six general fields of study consisting of humanities, sciences, business administration, education, social sciences, and criminal justice majors. A list showing the reclassification of all selected majors into these different areas of study can be found in Appendix B. Due to the fact that this question allowed the selection of multiple majors, there were some instances in which participants reported majors from two different fields. However, since it was not possible to classify a participant into two separate fields of study a prioritization of majors was required. To resolve this issue in a consistent manner the following approach was taken.

Students reporting a criminal justice major were classified into the field of criminal justice. Those indicating a major in education were delegated into the field of education.

Students reporting a science major were classified into the field of science except if the other selected major was criminal justice or education or two other majors were listed. Following this, students with business majors were classified into the field of business administration except if the second major was criminal justice, science, or education, or if two other majors from a different category were listed. Finally, combinations of social sciences and humanities majors were classified into the field of social science except if the individual reported two humanities majors in addition to a social science major.

There were two reason for separating criminal justice majors from social science majors. In the first place, criminal justice majors arguably receive more exposure to knowledge about crime than other social science majors. To include them in with other social science majors could have potentially affected the accuracy of the results. Furthermore, since criminal justice majors receive more exposure to matters relating to crime and criminal justice issues compared to other

majors, I wanted to focus more specifically on their perceptions of crime compared to other majors.

In addition to the above variables of interest to this study, demographic information on age, gender, and ethnicity was collected for the purpose of controlling for these factors in determining the effects of complexity and education on perceptions. Furthermore, to control for the potential effects of victimization on perceptions of crime severity and punitive attitudes, participants were asked to indicate whether they or anyone close to them had ever been a victim of crime. More specifically, for those who responded affirmative, a follow-up question asked them to indicate whether the crime in question included any of the criminal offences mentioned in the crime descriptions or scenarios and to specify the crime type(s) that applied to their experience of victimization. For this study, data on general victimization was used to control for the influence of prior victimization.

Data Analysis Procedures

Data analyses consisted of both univariate as well as bivariate and multivariate methods of analysis. Sample characteristics were described using descriptive statistics and frequency distributions. Falco and Martin (2012) note that the use of a convenience sample presents a number of methodological limitations. In particular, convenience samples can affect internal validity due to selection bias, subsequent conclusion validity, and the generalizability of results. To determine whether the sample population provided an accurate representation of the target population, sample frequencies were compared to the composition of the overall student population at the University of Winnipeg.

Subsequent analyses proceeded in four steps, addressing each of the hypothesis in turn. In the first place, the relationship between seriousness and levels of wrongfulness and harmfulness as predictors of seriousness was examined using multiple regression analysis as was done in previous research (Adriaenssen et al. 2018 & Rosenmerkel, 2001). The influence of moral wrongfulness and harmfulness on perceptions of seriousness was examined specifically for each crime type represented in the one-line descriptions as well as the scenarios. In each instance, tests for multicollinearity were conducted and results indicated that the variance inflation factors were low, the highest value being 1.53. Since the variance inflation factors did not exceed 10, multicollinearity was not an issue in this study. Subsequent regression results were compared between crime types as well as between crime representation type.

Although it may seem out of place to conduct and discuss multivariate analyses prior to conducting bivariate analyses, there is logic to such approach in this instance. This study was designed based on the understanding that seriousness could be conceptualized through perceived wrongfulness and harmfulness. Drawing on this conceptualization of seriousness, this study examined the influence of crime type, education, and crime representation on perceptions of seriousness as well as wrongfulness and harmfulness. With the exception of examining wrongfulness and harmfulness as predictors of seriousness, the variables wrongfulness and harmfulness are treated as dependent variables for the remaining analyses. To prove the legitimacy of using wrongfulness and harmfulness as additional predictors of seriousness and to provide a deeper understanding of how measures of seriousness, wrongfulness and harmfulness interact within the context of other variables it seemed most appropriate to start off the analysis of data in this manner. In addition, this approach is consistent with the principle of meaningful coherence adopted as a measure of quality in this study.

To examine the effect of crime type, crimes were ranked according to their mean levels of perceived seriousness, wrongfulness, and harmfulness for both the one-line descriptions as well

as the scenarios. Following the approach taken by Adriaenssen et al. (2018), paired t-tests were conducted for consecutive crimes in rank order, examining the difference from one rank to the next higher one for both one-line descriptions as well as crime scenarios. Comparisons were made between ranking order for the one-line descriptions and the crime scenarios. Ranking of crimes and paired t-tests were also conducted for levels of punitiveness in response to the scenarios.

The influence of education level and field of education on levels of seriousness, wrongfulness, harmfulness and punitiveness were analysed using the general linear model (GLM). In some ways similar to multivariate analysis of variance (MANOVA) and factorial analysis of variance (ANOVA), GLM enables the analysis of categorical as well as continuous variables thereby providing a balance between factorial ANOVA, MANOVA and regression. In addition, since all of the educational and demographic variables were categorical, a comparison of means between different groups seemed more appropriate. Furthermore, GLM procedures in SPSS were more user friendly and provided the opportunity to examine the interaction between level of education and field of study.

For this study, a custom model was designed that looked at the main effects of the range of credit hours completed and field of study as well as the interaction effect for these two variables on measures of seriousness, wrongfulness, and harmfulness for each crime type. In addition, the model included the main effects of demographic and victimization characteristics, controlling for potential confounding factors. It must be noted that while I did consider the potential of interaction effects between educational and control variables, preliminary exploration revealed no significant interaction results for any of the control variables either between themselves or with the two educational variables. Again, ratings of seriousness,

wrongfulness, and harmfulness for each crime type were compared within as well as between different methods of crime representation. In addition, different crime scenarios were also compared with respect to punitive attitudes. In instances of a significant main or interaction effect, post hoc analyses were conducted on the estimated marginal means using the Bonferroni procedure to determine which groups differed significantly.

Among the various post-hoc tests, the Bonferroni procedure is viewed as the most conservative approach. Indeed, in some instances the Bonferroni procedure may be oversensitive leading to an increased possibility of a Type II error, particularly with multiple pair-wise comparisons. However, as Lachlan and Spence (2005) point out, the use of ANOVA based analyses and multiple F tests increases the possibility of a Type I error, erroneously rejecting the null hypothesis. In addition, some of the results from the GLM analyses were barely significant at p < .05 suggesting an increased risk of committing a Type I error.

These factors suggest the need of a more conservative post-hoc test as opposed to a more liberal test to balance the risk of erroneously rejecting the null hypothesis with the possibility of failing to reject the null hypothesis. In conducting pairwise comparisons of estimated marginal means, the SPSS software offers the option of using the Least Significant Differences (LSD) analysis, the Bonferroni correction, or the Sidak test. In light of the nature of the GLM analyses and the subsequent results, use of the liberal LSD analysis would future increase the risk of a Type I error. Considering this, the Bonferroni correction offered the most appropriate approach to conduct pairwise comparisons while controlling for the risk of a Type I error for the purpose of this study.

Finally, as noted, analyses on the influence of crime type and education already compared results for one-line crime descriptions with those for the crime scenarios. While these

comparisons provided some useful context regarding the impact of crime representation, they did not reveal whether the differences observed were indeed statistically significant. To further examine the influence of crime representation in research on severity ratings paired sample t-tests were conducted comparing mean levels of seriousness, wrongfulness, and harmfulness for each crime type across different crime representations.

Before moving on to the results of the analyses, it is important to touch briefly on the attempt to quantify perceptions and attitudes using a Likert scale and the subsequent use of parametric tests. As O'Connell and Whelan (1996) note, the use of Likert scales as interval scores "poses a special problem for seriousness scores where the mean ratings given by respondents are usually directly used as the basis for ranking the offence items" (pp. 300-301). If there is a common understanding among respondents on the absolute value of the points on the scale, using Likert scales as interval scores poses no problem (O'Connell & Whelan, 1996). The key issue is that when this is not the case, some respondents may use the scale differently to others (O'Connell & Whelan, 1996). For example, females may in general give higher scores than males for all crime types. This results in the possibility that the effect of sex on seriousness scores may be simply a product of the survey method rather than an expression of any real difference (O'Connell & Whelan, 1996).

Considering this, the alternative approach suggested by O'Connell and Whelan (1996) involves treating the Likert scores as an ordinal scale and conducting analysis based on mean rankings. However, upon comparing the two approaches in measuring crime seriousness, O'Connell and Whelan (1996) note that this method is not without problems either. According to their results, "neither alternative appears to be superior and both make assumptions about the way the respondent uses the scale" (O'Connell & Whelan, 1996, p. 315). Indeed, they note that

considering the fact that respondents were given a rating scale but not asked to rank the offences, conducting an analysis based on the ranking method would degrade the measurements given by respondents and would therefore be less legitimate (O'Connell & Whelan, 1996).

When considering the appropriate method of analysing Likert data, it is also important to consider the use of parametric tests such as t-tests, regression, and GLM. Norman (2010) notes that the use of such statistical methods in analysing Likert data has been critiqued due to small sample sizes, non-parametric distribution of data, and the assumption that Likert data is ordinal and therefore parametric tests cannot be used. While the issue of a small sample size does not affect this study, the other two critiques on the use of parametric tests may carry some weight. However, Norman (2010) dismisses these challenges as unfounded and indicates that parametric statistics are quite robust with respect to dealing with the violations presented through non-parametric, Likert scale data.

Finally, relating more closely to the theoretical perspective adopted by this study, David Freedman (1991) critiques the use of statistical models, stating that such approaches lead to strong empirical claims about structure and causality but fail to address the assumptions inherent in the models employed. However, as Hayward and Young (2004) note, quantitative data needs to be disassociated with notions of objectivity and must be placed within time and place to fully understand and value its' contribution to knowledge. Indeed, by acknowledging the limitations of the statistical analysis and reflecting on the implications of those limitations this disassociation can be achieved. To put it differently, by accepting the results from these statistical analyses as one of many truths about perceptions and attitudes it becomes possible to employ these methods while mitigating the problems Freedman (1991) identifies. Having thus covered all aspects of the

methodological approach adopted by this study, I will now briefly describe the sample population whose responses were measured and analyzed using these statistical methods.

Participant Demographics

During the three weeks in which the survey was distributed, a total of 1192 survey responses were collected. This number does not include those respondents who were screened out of the survey because they were not currently enrolled in a course at the University of Winnipeg. Considering the total student population of 9684³ at the University of Winnipeg, the response rate for the survey was 12.3%. To ensure participation was voluntary, participants were offered a second opportunity to discard or submit their responses at the end of the survey. Survey responses that were incomplete, meaning that participants exited out of the survey before reaching the second opportunity to discard or submit their responses, were excluded from the study. The valid number of responses resulted in a sample of 971 participant responses. When recalculating the response rate to reflect only the valid responses, this study ends up with a 10% response rate.

To place the response rate into perspective, a few considerations need to be mentioned. Firstly, the total number of students enrolled at the University of Winnipeg used to calculate the response rate is based from a count taken in November 2019 and thus may not reflect the exact number of students enrolled at the university at the time the survey was distributed in March 2020. In addition, the total number of students enrolled at the university most likely included a number of students that were not taking courses at the time the survey was distributed. Thus, it is possible that the target population may have been smaller than the total student population. Consequently, there is a possibility that the survey response rate may actually be slightly higher.

³ As of November 1, 2019.

In addition to the uncertainty regarding the total target population, there was also the matter of campus closures. During the period of time in which the survey was distributed, the University of Winnipeg closed down campus buildings in response to the rise of COVID 19. Campus closures resulted in a massive shift from classroom learning to on-line instruction. The uncertainty of the situation combined most likely with a significant increase in email correspondence students received from both the university as well as class instructors potentially also affected the survey response rate. Despite these issues, a comparison of the sample characteristics with those of the target population indicated that the sample was quite representative of the total target population. Table 1 provides a succinct breakdown of the sample composition.

Table 1. Student Survey Sample Demographics, Prior Victimization and Educational Factors (N = 971)

| Characteristic | n | % | Characteristic | n | % |
|-------------------------------------|-----|---------|-----------------------------------|-----|--------|
| Gender | | | Student Status | | |
| Woman | 652 | 67.78 | Part-time undergraduate | 123 | 12.76 |
| Man | 276 | 28.69 | Full-time undergraduate | 807 | 83.71 |
| Other | 34 | 3.53 | Part-time graduate | 17 | 1.76 |
| Total | 962 | 100.00 | Full-time graduate | 17 | 1.76 |
| Ethnicity | | | Total | 964 | 99.99* |
| Indigenous | 97 | 10.16 | Years of Post-Secondary Education | | |
| White/Caucasian | 575 | 60.21 | Less than 1 | 163 | 16.89 |
| Asian | 208 | 21.78 | 1 | 74 | 7.67 |
| Black | 42 | 4.40 | 2 | 174 | 18.03 |
| Other | 33 | 3.46 | 3 | 198 | 20.52 |
| Total | 955 | 100.01* | 4 | 144 | 14.92 |
| Age | | | 5 or more | 212 | 21.97 |
| 17 or younger | 6 | 0.62 | Total | 965 | 100.0 |
| 18 - 24 | 736 | 76.51 | Credit Hours ^b | | |
| 25 - 34 | 168 | 17.46 | 0 - 30 | 271 | 28.14 |
| 35 - 44 | 33 | 3.43 | 31 - 60 | 244 | 25.34 |
| 45 - 54 | 10 | 1.04 | 61 - 90 | 197 | 20.46 |
| 55 or older | 9 | 0.94 | 90 or more | 251 | 26.06 |
| Total | 962 | 100.00 | Total | 963 | 100.00 |
| Prior Victimization | | | Area of Study | | |
| No | 406 | 43.24 | Business | 105 | 11.35 |
| Yes | 533 | 56.76 | Education | 138 | 14.92 |
| Total | 939 | 100.00 | Science | 288 | 31.14 |
| Specific Victimization ^a | | | Humanities | 93 | 10.05 |
| Fraud | 97 | 18.58 | Social Sciences | 181 | 19.57 |
| Hate Propaganda | 68 | 13.03 | Criminal Justice | 120 | 12.97 |
| Assault | 263 | 50.38 | Total | 925 | 100.00 |
| Break and Enter | 286 | 54.79 | | | |
| Other Crime | 62 | 11.88 | | | |

 $^{^{}a}N = 522$, each number and percentage of participants reflects those responding and answering yes to this type of specific victimization within those answering yes to prior victimization;

 $^{^{}b}N = 963, M = 58.71, SD = 41.62, Range\ 0 - 240;$

^{*}percentage does not equal 100 due to rounding.

Since post-secondary students were the target population, it is not surprising to find that most participants are in their early twenties. Although participant age ranged from 17 years or younger to 55 years or older approximately three-quarter (76.51%) of the participants fall between the ages of 18 – 24 compared to the average age of 24 for the target population. More than half (67.78%) of the participants were female while only 28.69% were male. Gender diverse, two spirit, trans man and trans woman participants make up the remaining 3.53%. These numbers are representative of the target population. As of November 1, 2019, the University of Winnipeg reported that 62% of the student population was female.

In terms of ethnicity, more than half (60.21%) of participants identified themselves as Caucasian. Approximately one-fifth (21.78%) of participants identified as Asian (South, Southeast, and West Asian; Chinese, Korean, Japanese, Filipino and Arab). Comparative with the 12% of Indigenous students enrolled at the university, only 10.16% of the survey participants identified as Indigenous (First Nations, Metis, Inuk), while 4.40% of participants identified as Black. The remaining 3.46% of participants primarily identified as Latin American or Jewish.

To examine and control for the influence of victimization on perceptions of crime, students were asked whether they or anyone they knew of had been a victim of a crime. Students who indicated prior victimization experience were then asked whether that experience included aspects of the crimes mentioned in the scenarios (fraud, hate propaganda, assault, break and enter) or if the experience involved a different type of crime. Of the participants that responded to the question about prior victimization, 56.76% indicated they had experienced prior victimization. Within those participants with prior victimization, 54.79% indicated that the crime involved aspects of break and enter, while 50.38% of participants had prior experience with assault. Less than one-fifth (18.58%) had prior experience with fraud, while 13.03% had

encountered hate crime. Approximately a tenth (11.88%) indicated being a victim of a crime other than those mentioned in the scenarios.

To examine the influence of post-secondary education, students were asked questions concerning their student status as well as level of education and field of study. As of November 1, 2019, the University of Winnipeg reported that 97.2% of the student population were enrolled as undergraduate students while graduate students made up 2.8% of the total student population. Comparing these numbers with those of the sample population, it can be noted that the sample is quite representative of the target population. Of those participants that responded to these questions, the majority (96.49%) were enrolled as an undergraduate student at the University of Winnipeg. More than four-fifths (83.71%) of the undergraduate participants were full-time students, while 12.76% of participants indicated they were part-time students. Only 3.52% of participants indicated they were currently enrolled as graduate students.

Post-secondary education, measured in the number of years each participant had attended a post-secondary institution, ranged from less than 1 year to 5 or more years. Approximately a quarter (24.56%) of participants that responded indicated that they had 1 year or less of post-secondary educational experience while 38.55% reported between 2 and 3 years and the remaining one-third (36.89%) had 4 or more years of experience. There was a large range of 0 to 240 credit hours completed, although this was slightly skewed. However, the number of credit hours across the survey respondents was distributed quite evenly. Close to a third (28.14%) of the individuals that responded ranged between 0 to 30 credit hours. Not quite half (45.80%) of the participants ranged between 31 to 90 credit hours, while approximately a quarter (26.06%) indicated they had completed more than 90 credit hours. On average, student participants completed 58.71 credit hours (SD = 41.62).

To examine the impact of participants' field of study, majors were grouped into six different fields: criminal justice, social science (e.g., sociology, psychology), humanities (e.g., history, rhetoric writing, English), business, education, and sciences (e.g., biology, chemistry, physics). As mentioned before, criminal justice students were of particular interest in examining perceptions of crime and the influence of post-secondary education due to the nature of their studies and its relevance to crime and crime-related matters. Therefore, to examine and control for the impact of criminal justice studies, students indicating a major in criminal justice were separated from the other fields of study and designated into a separate category. Of those students that responded to the questions about area of study, 13% indicated they would major in criminal justice.

Approximately one-fifth (19.57%) of the participants selected a major within the field of social science. Another 31.14% of those that responded selected science majors (including kinesiology majors). The remaining third of participants selected a field of study within education (14.92%), business (11.35%), or humanities (10.05%). Most of the missing responses (4.74% of the total sample) can be attributed to students that had not decided on a major at the time of the survey (3.30% of the total sample).

Comparing these numbers with those reported for the target population, it was found that the presence of the different fields of study within the sample population was representative of the target population. In general, it can be noted that the sample used for this study is also quite representative of the general target population in terms of educational and demographic characteristics. Having thus defined my research hypothesis, the methodological approach to sample selection, survey design and data analysis, and the subsequent study sample, the following chapters will describe and discuss the actual results for the study.

Chapter 4: The Influence of Wrongfulness and Harmfulness

In the previous sections, I have described the purpose of the study and outlined the theoretical approach taken in this research in looking at perceptions and attitudes towards crime and matters of crime representation. Furthermore, I reviewed prior literature on perceptions of crime seriousness and attitudes towards punishment. Finally, in chapter three, I outlined the research questions and hypotheses of this study. I also discussed in greater detail the methodological approach used in this study, describing the process of sample selection and recruitment, survey design and distribution, research variables, and the analytical methods employed to measure and compare these variables. In addition, I also described the composition of the sample population, comparing it to the target population to ensure representativeness.

In this chapter and the following three chapters, I wish to discuss the results of the study. Although all research objectives relate to each other and the perception of crime as a whole, the results and potential discussion relevant to each objective is substantial. Therefore, for the sake of clarity, separate chapters are dedicated to each hypothesis. Each of the following chapters will describe and discuss the results of one of the research objectives. Following these sections, I engage in a complete and comprehensive discussion of the research that addresses all of the research hypotheses as a whole.

In this chapter, I will describe and discuss the influence of wrongfulness and harmfulness as predictors of seriousness. Seriousness of crime is in some ways an abstract concept. However, understanding how severity of crime gets determined may be beneficial to shed light on what shapes these perceptions. Recognizing the need for understanding the meaning of severity, Warr (1989) first set out to define seriousness and concluded that severity judgements reflect a balance between perceived moral wrongfulness and harmfulness. Subsequent studies (Adriaenssen et al.

2018; Stylianou, 2003; Rosenmerkel, 2001) have reached similar conclusions although the exact degree to which each dimension factors into seriousness judgements remains contested. Thus Stylianou (2003) concluded that harmfulness was the primary determinant of severity ratings. Contrary to this, Adriaenssen et al. (2018) decided that seriousness ratings are mainly predicted by the perceived moral wrongfulness.

Regardless of the dimensions, examining the relationship between wrongfulness, harmfulness, and seriousness offers an opportunity to understand the participant thought process in determining severity. Perceived moral wrongfulness and perceived harmfulness may change over time. Understanding their impact on perceptions of crime severity adds a deeper dimension to understanding students' perceptions of crime seriousness and subsequent punitive attitudes. For this reason, I wish to examine the impact of perceived wrongfulness and harmfulness on measures of seriousness for the crimes described in the survey. Drawing on the results from prior research, I posit that both moral wrongfulness as well as perceived harmfulness will predict a significant amount of variability in seriousness ratings depending on the crime type and representation.

Regression Results

To analyse the contribution of wrongfulness and harmfulness to ratings of seriousness, linear regression analyses were conducted for all crime types with seriousness as the dependent variable and wrongfulness and harmfulness as independent variables. This approach follows the analytical approach adopted in previous research (for example, Adriaenssen et al. 2018 & Rosenmerkel, 2001). As mentioned before, although it may seem odd to discuss multivariate analyses prior to looking at bivariate tests, the reason for doing so in this case is based on the theoretical stance taken as well as on the principle of meaningful coherence adopted as a measure of quality in this study. Examining the influence of wrongfulness and harmfulness on

perceptions of seriousness provides a deeper understanding of how these measures interact within the context of other variables. The results of the regression analysis are presented on the following page. Table 2 presents regression results for the one-line crime descriptions while Table 3 describes the results in response to the crime scenarios.

 Table 2. Regression Results for One-Line Crime Description Seriousness Ratings on Wrongfulness and Harmfulness.

| | Fraud | | Hate | Crime | Ass | ault | Break and Enter | |
|---------------------------|-------------|-----------|------------|-----------|-------------|-----------|-----------------|-----------|
| | B(SE) | Beta | B(SE) | Beta | B(SE) | Beta | B(SE) | Beta |
| (Constant) | 1.46 (0.21) | | 32 (0.20) | | 1.00 (0.21) | | .44 (0.21) | |
| Components of Seriousness | | | | | | | | |
| Wrongfulness | .51 (0.03) | .48*** | .41 (0.03) | .34*** | .38 (0.03) | .38*** | .40 (0.03) | .34*** |
| Harmfulness | .27 (0.03) | .30*** | .57 (0.02) | .56*** | .49 (0.03) | .46*** | .49 (0.02) | .51*** |
| Adjusted R2 | | .49 | | .66 | | .57 | | .57 |
| Model F | | 458.70*** | | 936.00*** | | 653.09*** | | 647.36*** |

Note: df = 2, 968; standardized coefficients were used, *p < .05, **p < .01, *** p < .001

 Table 3. Regression Results for Crime Scenario Seriousness Ratings on Wrongfulness and Harmfulness.

| | Fraud | | Hate Crime | | Assault | | Break a | and Enter |
|---------------------------|-------------|-----------|------------|-----------|------------|-----------|------------|-----------|
| | B(SE) | Beta | B(SE) | Beta | B(SE) | Beta | B(SE) | Beta |
| (Constant) | 1.02 (0.18) | | .04 (0.21) | | 78 (0.20) | | .82 (0.18) | |
| Components of Seriousness | | | | | | | | |
| Wrongfulness | .45 (0.03) | .44*** | .45 (0.03) | .37*** | .45 (0.03) | .43*** | .45 (0.03) | .43*** |
| Harmfulness | .40 (0.02) | .44*** | .51 (0.02) | .53*** | .45 (0.02) | .47*** | .40 (0.02) | .45*** |
| Adjusted R2 | | .61 | | .64 | | .66 | | .58 |
| Model F | | 764.33*** | | 873.25*** | | 926.78*** | | 671.59*** |

Note: df = 2,968;

standardized coefficients were used,

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

One-line Crime Descriptions

Looking at Table 2, the regression model predicted 49% (adjusted R² = .49) of the variability in seriousness ratings for fraud, F(2, 968) = 458.70, p < .001. Wrongfulness and harmfulness were both significant predictors of fraud seriousness ratings, although the slope for wrongfulness was slightly higher (β = .48, t(968) = 17.24, p < .001) than that for harmfulness (β = .30, t(968) = 10.57, p < .001). Contrary to the results for fraud severity, harmfulness contributed more significantly to severity ratings of hate crime (β = .56, t(968) = 23.89, p < .001) than wrongfulness (β = .34, t(968) = 14.65, p < .001). These two predictors accounted for 66% (adjusted R² = .66) of the total variability in severity ratings for hate crime, F(2, 968) = 936.00, p < .001.

The results for assault and break and enter show similar trends to the previous two crime types. The overall model significantly predicted 57% (adjusted R² = .57) of the total variability in seriousness ratings for assault, F(2, 968) = 653.09, p < .001. Perceived levels of harmfulness again contributed slightly more significantly to seriousness ratings ($\beta = .46$, t(968) = 17.14, p < .001) than perceived wrongfulness ($\beta = .38$, t(968) = 14.08, p < .001). For the severity of break and enter, both wrongfulness and harmfulness contributed significantly to perceived seriousness ratings ($\beta = .34$, t(968) = 13.58, p < .001; $\beta = .51$, t(968) = 20.21, p < .001) and predicted 57% (adjusted R² = .57) of the variability in seriousness scores, F(2, 968) = 647.36, p < .001.

Crime Scenarios

Comparing the regression results for the one-line descriptions (Table 2) with those for the crime scenarios (Table 3), it can be observed that percentage of variance accounted for in severity ratings for fraud increased by 12% for the crime scenarios (Adjusted R² = .61), F(2, 968) = 764.33, p < .001. Although still significant, the influence of perceived wrongfulness on seriousness ratings decreased slightly compared to the one-line description ($\beta = .44$, t(968) = .44).

17.65, p < .001) while the influence of perceived harmfulness increased ($\beta = .44$, t(968) = 17.64, p < .001). However, when viewing the t-test values, wrongfulness still remains the slightly stronger predictor of perceived seriousness of fraud. Fraud is the exception in this case; for all the other crime types harmfulness appears to be the stronger predictor of severity ratings.

The proportion of predicted variance in seriousness scores for hate crime remained virtually the same (Adjusted R² = .64), F(2, 968) = 873.25, p < .001. The influence of perceived wrongfulness saw a slight increase ($\beta = .37$, t(968) = 16.24, p < .001) while the impact of perceived harmfulness decreased ($\beta = .53$, t(968) = 23.17, p < .001). The proportion of predicted variance in assault seriousness ratings accounted for by the model, increased to 66% (Adjusted R² = .66) for the crime scenario, F(2, 968) = 926.78, p < .001). Furthermore, the effect of perceived wrongfulness ($\beta = .43$, t(968) = 17.65, p < .001) and perceived harmfulness ($\beta = .47$, t(968) = 19.46, p < .001) on seriousness scores increased as well. For the break and enter scenario the proportion of predicted variance in severity scores increased by 1% for the scenario (Adjusted R² = .58), F(2, 968) = 671.59, p < .001. Looking at both components, we note that the influence of perceived wrongfulness on ratings of seriousness increased ($\beta = .43$, t(968) = 17.50, p < .001) while the impact of perceived harmfulness decreased ($\beta = .45$, t(968) = 18.30, p < .001).

Discussion

Reviewing the results, it can be noted that contrary to the findings of Adriaenssen et al. (2018), seriousness ratings seem to be determined somewhat more by levels of perceived harmfulness than moral wrongfulness, with the exception of fraud. As predicted, perceived wrongfulness and harmfulness are significant predictors of perceived seriousness (p < .001), explaining between 49% (fraud) to 66% (hate crime) of the variability in seriousness ratings for

the one-line descriptions without accounting for other variables. Furthermore, regression results for the crime scenario seriousness ratings on wrongfulness and harmfulness show similar if not more strongly predictive outcomes with the overall model explaining between and 58% (break and enter) to 66% (assault) of the variance in seriousness ratings. However, the difference between slopes does appear to decrease with most scenarios.

The comparison of the regression results between one-line descriptions and crime scenarios must be interpreted with some caution. While one-line descriptions are quite generic in nature and open to interpretation, the crime scenarios are quite specific and leave little to the participant's imagination. Indeed, it is very likely that the use of a different scenario may result in different findings. For this reason, generalization of the findings for the crime scenarios to all crimes in the same category may be inappropriate

Nevertheless, the highly significant impact of perceived wrongfulness and harmfulness on levels of seriousness as demonstrated in both Table 2 and Table 3, supports the findings from previous studies regarding the importance of wrongfulness and harmfulness as predictors of seriousness (see Warr, 1989; Rosenmerkel, 2001; Stylianou, 2003; Adriaenssen et al., 2018). One needs to remember that seriousness is an abstract concept informed by perceived notions of moral wrongfulness and harmfulness. These notions of wrongfulness and harmfulness are reflections of social values and knowledge of crime. Therefore, it is possible to reason that in order to observe a change in perceived seriousness, perceptions of wrongfulness and harmfulness must change.

These results emphasize the need for conceptualizing seriousness and the subsequent inclusion of measures of perceived wrongfulness and harmfulness in research examining the influence of other factors on crime severity. While direct influence by factors such as crime type,

education, and crime representation on perceived seriousness is possible, there may also be an indirect influence through changes in perceived wrongfulness and harmfulness that needs to be realized.

Chapter 5: The Influence of Crime Type

In the previous chapter, I illustrated the significant influence of perceived wrongfulness and harmfulness on perceptions of seriousness. The results of the regression analysis allowed for a deeper understanding regarding the role of moral wrongfulness and harmfulness in severity ratings for the subsequent analyses in this study. Furthermore, it emphasized the need to include these measures of severity in further explorations regarding the perceived severity of crime.

In this chapter, I wish to illustrate the influence of crime type on perceptions of seriousness, wrongfulness, and harmfulness. Different types of crimes elicit different responses from the public. Prior research has overwhelmingly indicated that crimes involving direct physical and psychological harm, such as violent crimes, are rated as more serious by the public compared to property and white-collar crimes (see Adriaenssen et al. 2018; Stylianou, 2003; Rosenmerkel, 2001; Michel, 2016). Furthermore, studies have also indicated that there is a relative cross-cultural consensus on the seriousness of crimes involving violence and bodily harm (O'Connell & Whelan, 1996; Stylianou, 2003).

In addition to perceptions of crime severity, I also wish to examine the influence of crime type on punitive attitudes. Our perceptions guide our actions. This holds true with respect to crime as well. Punitive attitudes towards crime can be said to be a direct reflection of the perceived seriousness, wrongfulness, and harmfulness of the crime. For example, overwhelming public support for mandatory minimum sentencing for violent crime led Roberts, Crutcher, and Verbrugge (2007) to suggest a link in the public mind between the perceived seriousness of the offence and the subsequent appropriate sentence. Furthermore, as was pointed out previously, studies have indicated that trends in perceived seriousness for different crime types and

subsequent attitudes towards punishment are similar (Rossi et al., 1985; Michel, 2016; Schoepfer et al., 2007; Baird et al., 2016).

Drawing on these studies, it was hypothesized that crimes with higher ratings of seriousness would have higher levels of consensus on moral wrongfulness and higher levels of perceived harmfulness. In addition, mean severity rating of violent crimes would be significantly higher than that of non-violent hate crimes, property crimes, or white-collar crimes. Finally, I expected that the trend in punitive attitudes will match that of perceived seriousness levels with students being more punitive towards violent crime than towards other crime types.

Severity Ratings

Participants considered all four crime types as quite serious, wrong, and harmful for both the one-line crime descriptions as well as crime scenarios. The lowest ratings for each component averaged higher than 6 on a scale of 1 to 10 with 10 being most serious, wrong, and harmful. For the one-line crime descriptions, as predicted, assault, as a violent crime, was ranked as most serious (M = 8.60, SD = 1.61) followed by hate crime (M = 7.63, SD = 2.33) and fraud (M = 7.47, SD = 2.07). Contrary to what was expected, break and enter crimes were considered the least serious (M = 7.17, SD = 2.14). When considering wrongfulness and harmfulness, assault was again ranked as most wrong and harmful (M = 8.77, SD = 1.62; M = 8.81, SD = 1.53) followed once more by hate crime (M = 8.63, SD = 1.94; M = 7.74, SD = 2.30). However, differing from the seriousness ratings, break and enter was considered more morally wrong than fraud (M = 8.21, SD = 1.83 compared to M = 8.05, SD = 1.95) as well as more harmful (M = 7.01, SD = 2.22 compared to M = 6.90, SD = 2.26).

The ratings in response to the specific crime scenarios showed some similar trends, but also some striking changes. Corresponding with previous results, assault was rated as most

serious (M = 9.12, SD = 1.29). However, contrary to the ratings for the one-line descriptions, fraud was considered more serious than hate crime (M = 7.92, SD = 1.68 compared to M = 7.69, SD = 2.02). Break and enter was considered least serious of all four crime scenarios (M = 6.88, SD = 1.87). Ratings of wrongfulness and harmfulness follow a similar pattern. Assault was rated as most wrongful (M = 9.27, SD = 1.23) and most harmful (M = 9.26, SD = 1.35) of all four crime types. Similar to the one-line crime description ratings, hate crime follows assault on levels of wrongfulness (M = 8.67, SD = 1.68).

Differing from the ratings on the one-line crime descriptions, break and enter was considered least wrongful (M = 7.97, SD = 1.78) and harmful (M = 6.30, SD = 2.11) of all four crime types described in the scenarios. In addition, the perceived level of wrongfulness and harmfulness of fraud increased for the crime scenarios as compared to the one-line descriptions in which fraud is considered the least morally wrong and harmful. For moral wrongfulness, fraud is considered less wrong than hate crime but more morally wrongful than break and enter (M = 8.45, SD = 1.65). Most notable, however, is the change in harmfulness ratings for fraud, going from the least harmful of all four crimes in the one-line crime descriptions to second only to assault in harmfulness in the crime scenarios (M = 7.77, SD = 1.87).

In addition to ranking the crime types, paired t-tests were conducted to examine whether the resulting ranks represented significant differences. Following the example set by Adriaenssen et al. (2018), paired t-test results for consecutive crimes in rank order are presented in Table 4, indicating significant differences from one rank to the next higher one (p < .05, two tailed). For example, the t value and the p value found on Table 4 for the seriousness of break and enter represents the significance of the mean difference between the mean severity rating for break and enter crimes and fraud crimes. Similarly, the t and p values for the seriousness of fraud

represents the significance of the mean difference between the mean severity rating for fraud crimes and hate crimes.

Table 4. Rank Order of Crime Seriousness, Wrongfulness, and Harmfulness per Crime Type

| | (| One-line | description | | | Sce | nario |
|-----------------|------|----------|-------------|-----------------|------|------|----------|
| | M | SD | t(970) | | M | SD | t(970) |
| Seriousness | | | | Seriousness | | | |
| Assault | 8.61 | 1.61 | | Assault | 9.12 | 1.29 | |
| Hate Propaganda | 7.63 | 2.34 | 12.98*** | Fraud | 7.92 | 1.69 | 22.95*** |
| Fraud | 7.47 | 2.07 | 1.87 | Hate Propaganda | 7.69 | 2.02 | 3.66*** |
| Break and Enter | 7.17 | 2.14 | 4.08*** | Break and Enter | 6.88 | 1.87 | 12.11*** |
| Wrongfulness | | | | Wrongfulness | | | |
| Assault | 8.77 | 1.62 | | Assault | 9.27 | 1.23 | |
| Hate Propaganda | 8.63 | 1.94 | 2.06* | Hate Propaganda | 8.67 | 1.68 | 11.59*** |
| Break and Enter | 8.21 | 1.83 | 5.89*** | Fraud | 8.45 | 1.65 | 4.10*** |
| Fraud | 8.05 | 1.95 | 2.49* | Break and Enter | 7.97 | 1.78 | 9.86*** |
| Harmfulness | | | | Harmfulness | | | |
| Assault | 8.81 | 1.53 | | Assault | 9.26 | 1.35 | |
| Hate Propaganda | 7.74 | 2.30 | 14.15*** | Fraud | 7.77 | 1.87 | 24.88*** |
| Break and Enter | 7.01 | 2.22 | 7.98*** | Hate Propaganda | 7.43 | 2.14 | 4.74*** |
| Fraud | 6.90 | 2.26 | 1.40 | Break and Enter | 6.30 | 2.11 | 15.14*** |

Note: N = 971,

In general, and with two exceptions, the mean differences between ranked crimes were significantly different. In examining levels of seriousness in response to the one-line crime descriptions there was a significant 12.84% difference between levels of seriousness attributed to assault, compared to severity levels for hate crime (t(970) = 12.98, p < .001). The mean difference between seriousness ratings for hate crime and fraud was not significantly different (t(970) = 1.87, p = .062). However, the small 4.18% increase in severity levels for fraud compared to break and enter was statistically significant (t(970) = 4.08 p < .001).

A miniscule 1.62% difference in levels of wrongfulness between assault and hate crime was surprisingly significantly different (t(970) = 2.06, p < .05), although the 5.12% increase

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

between hate crime and break and enter was significantly larger and stronger (t(970) = 5.89, p < .001). Furthermore, despite the slight mean percentage difference (1.99%) in levels of wrongfulness between fraud and break and enter, a small, but statistically significant change was also observed (t(970) = 2.49, p < .05).

Following the pattern set by the ranking of crimes by levels of wrongfulness, levels of harmfulness indicated a significant 13.82% increase in ratings between assault and hate crime (t(970) = 14.15, p < .001). Additionally, the mean difference of 10.41% between the harmfulness ratings of hate crime and break and enter was also statistically significant (t(970) = 7.98, p < .001). However, the difference between break and enter and fraud was not statistically significant (t(970) = 1.40, p = .161).

In comparison, differences between ranked crimes also showed greater substantive and stable differences for responses to the crime scenarios as opposed to responses to the one-line crime description. For levels of seriousness, a 15.15% mean difference between assault and fraud revealed a significant change in rating (t(970) = 22.95, p < .001). Although smaller, the small percentage increase (2.99%) between fraud and hate crime showed a statistically significant difference (t(970) = 3.66, p < .001). Likewise, a slightly larger difference of 11.77% between hate propaganda and break and enter was also considered statistically significant (t(970) = 12.11, p < .001). Similar to the differences in seriousness rankings, the 6.92% mean difference for levels of wrongfulness between assault and hate crime was statistically significantly (t(970) = 11.59, p < .001). A mean difference of 2.60% between hate crimes and fraud, although small, also proved to be statistically significant (t(970) = 4.10, p < .001) although the 6.02% change in wrongfulness ratings between fraud and break and enter showed a slightly stronger effect (t(970) = 9.86, p < .001).

Following the trend set by the ranking of crimes by levels of seriousness and wrongfulness, levels of harmfulness indicated a strongly significant mean difference of 19.17% between assault and fraud (t(970) = 24.88, p < .001). Again, the difference between the ratings on fraud and hate crimes was noticeably smaller (4.58%) although still significantly different (t(970) = 4.74, p < .001). The distinction between hate crimes and break and enter shows an increased difference between rankings again with a significant mean difference of 17.94% (t(970) = 15.14, p < 001).

Punitivity

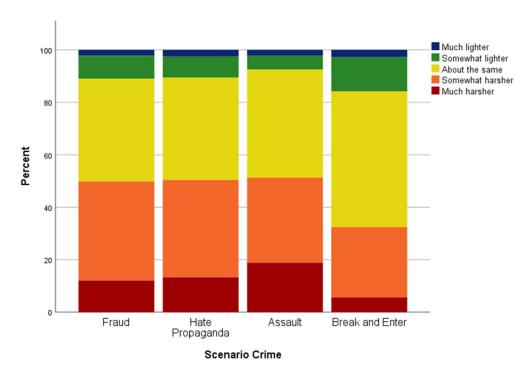


Figure 1. Suggested Sentence Severity by Scenario Crime Type.

The following results describe participants' attitudes towards sentencing for each crime type. As illustrated above in Figure 1 and described below in Table 5, when asked about the appropriateness of the sentence described in the case scenario students in general tended to be

more punitive, indicated that the sentence they would suggest would be "about the same" or harsher than the sentence that was meted out in the scenario.

Table 5. Suggested Sentence Severity by Scenario Crime Type.

| | | Scenario Crime | | | | | | | | | |
|--------------------|---------|----------------|------------|--------|-------|--------|-----------------|--------|--|--|--|
| | Assault | | Hate Crime | | Fraud | | Break and Enter | | | | |
| Suggested Sentence | N | % | N | % | N | % | N | % | | | |
| Much lighter | 21 | 2.16 | 25 | 2.57 | 22 | 2.27 | 27 | 2.78 | | | |
| Somewhat lighter | 52 | 5.36 | 78 | 8.03 | 85 | 8.75 | 127 | 13.08 | | | |
| About the same | 400 | 41.19 | 379 | 39.03 | 380 | 39.13 | 502 | 51.70 | | | |
| Somewhat harsher | 315 | 32.44 | 360 | 37.08 | 367 | 37.80 | 261 | 26.88 | | | |
| Much harsher | 183 | 18.85 | 129 | 13.29 | 117 | 12.05 | 54 | 5.56 | | | |
| Total | 971 | 100.00 | 971 | 100.00 | 971 | 100.00 | 971 | 100.00 | | | |

Examining the results in greater detail, Table 5 shows that for fraud, 39.13% of participants indicated that a similar sentence to the one given would be appropriate. Over a third of participants (37.80%) felt that the sentence should be "somewhat harsher" while 12.05% felt that the sanction should be "much harsher". Less than one-fifth (8.75%) felt the sentence should be "somewhat lighter" and only 2.27% suggested a "much lighter" sentence.

Participant responses to hate crime revealed a similar pattern. Approximately two-fifth (39.03%) of participants suggested the sentence should be "about the same" as the sanction given in the case. Like fraud, 37.08% of participants felt that the sanction should be "somewhat harsher" and 13.29% suggested a "much harsher" sentence. Only 8.03% of participants felt the sentence could be "somewhat lighter" and a mere 2.57% choose a "much lighter" sentence for the hate crime scenario.

Participants were most punitive in response to the assault case scenario. Of the 971 participants, 41.19% felt the appropriate sentence would be "about the same" as the sentence

meted out by the court. Roughly a third (32.44%) felt that the sentence should be "somewhat harsher" while almost one-fifth (18.85%) felt that the sentence should be "much harsher". In terms of a lighter sentence, only 5.36% suggested a "somewhat lighter" sanction while 2.16% felt a "much lighter" sentence would be appropriate. The break and enter case scenario saw the most lenient responses, although the trend still stayed punitive. Over half (51.70%) of participants felt that the sentence described in the scenario was appropriate. A little over a quarter (26.88%) of the participants felt the sentence could be "somewhat harsher" while only 5.56% of participants suggested a "much harsher" sentence. While the percentage of participants suggesting a harsher punishment for break and enter is noticeably lower than for the other crime scenarios, it is still higher than the percentage of participants that felt a lighter sentence was more appropriate. Only 13.08% of participants suggested a "somewhat lighter" sentence and a mere 2.78% of student participants felt a "much lighter" sentence would be appropriate.

To investigate whether punitive attitudes towards various crimes followed a similar pattern as seriousness ratings, the mean suggested sentence responses between crime types were compared and the difference was tested for significance using a paired sample t-test. Similar to the process followed in ranking crime for seriousness, paired t-test results for consecutive crimes in rank order are presented in Table 6, indicating significant differences from one rank to the next higher one (p < .05, two tailed). For example, the t and t value found on Table 6 for the seriousness of break and enter represents the significance of the mean difference between the mean ratings of suggested sentence severity for break and enter crimes and fraud crimes. Similarly, the t and t values for the seriousness of fraud represents the significance of the mean difference between the mean severity rating of suggested sentence severity for fraud crimes and hate crimes.

| | M | SD | t(970) |
|-----------------|------|------|--------|
| Crime Type | | | |
| Assault | 3.60 | 0.92 | |
| Hate Propaganda | 3.50 | 0.91 | 2.61** |
| Fraud | 3.49 | 0.90 | 0.51 |

3.19

0.84

8.35***

Table 6. Ranking of Suggested Sentence Severity by Scenario Crime Type

Note: N = 971,

Break and Enter

As illustrated in Table 6, the ranking of suggested sentence severity by crime type from most severe to least severe follows a similar pattern as the ranking for crime seriousness. Participants were most punitive for the assault scenario (M = 3.60, SD = 0.92) followed by hate crime (M = 3.50, SD = 0.91) and fraud (M = 3.49, SD = 0.90). Following the trend set by severity ratings, participants were the least punitive for the break and enter scenario (M = 3.19, SD = 0.84). The results from the paired sample t-test revealed that while the 9.4% increase in suggested sentence severity between break and enter and fraud was statistically significant (t(970) = 8.35, p < .001) the difference in suggested sentence severity for fraud and hate crime was not statistically significant (t(970) = 0.51, p = .613). The miniscule 2.86% mean difference between hate crime and assault was also significant (t(970) = 2.61, p < .01).

Discussion

Severity Ratings

Reviewing the results for perceived severity, a general pattern can be observed. There seems to be a consensus on the severity, wrongfulness, and harmfulness of assault for both the one-line crime descriptions as well as the crime scenarios. However, there is a notable increase in variability among crime types other than assault, in particular for the one-line crime descriptions, indicating some ambiguity regarding the perceived seriousness of these crimes.

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

This trend in variance aligns with the observations made by Einat and Herzog (2011) who related that most studies on offence seriousness tended to show that higher seriousness means were usually accompanied by lower standard deviations. Nevertheless, these findings support the findings from other studies (Rossi et al., 1974; Warr, 1989; O'Connell & Whelan, 1996; Rosenmerkel, 2001; Stylianou, 2003; Einat & Herzog, 2011; Michel, 2016; Adriaenssen et al., 2018) and confirm the hypothesis that violent crimes are generally ranked as more severe, morally wrong, and harmful than other crimes. To some degree, it may be suggested that this phenomenon can also be observed in the perceptions of hate crime.

Responses to the one-line crime description of hate crime indicate that this offence is considered most serious, wrong, and harmful, second only to assault. In particular, the small difference in wrongfulness ratings for assault compared to hate crimes suggests that respondents may perceive hate crime as almost as morally reprehensible as assault. This trend in perception of wrongfulness persists in the ratings for the crime scenario where hate crimes replace fraud in wrongfulness ranking.

Prior research on perceptions of crime did not examine perceptions of hate crime specifically and thus these findings cannot be compared with prior studies. However, the high ranking of hate crimes suggests that students may reflect on the possible psychological harm caused by hate crime as well as the potential physical violence that can arise out of hate crime in making severity judgements. This approach would correspond with the argument that violent crimes will be ranked higher in perceived seriousness than other nonviolent crime types. In addition, the persistently high ratings for moral wrongfulness can perhaps also be informed and influenced by the recent social unrest over systemic discrimination due to race. Specific to Winnipeg, an article written by Nancy Macdonald and published by McLeans in 2015 termed the

city as the place "where Canada's racism problem is at its worst", creating local awareness of the problem of racism. Since then, there has been a heighted social awareness on matters regarding racism. Indeed, local protests held during the summer of 2020 supporting the Black Lives Matter movement in response to the death of George Floyd illustrate a potential shift in social perceptions towards racism (Frew, 2020).

Within the epistemological framework of social constructionism and the theory of social interactionism, knowledge is a social product, but knowledge also produces social change (Berger & Luckmann, 1966). An increase in social representations of racism and hate crime and a denunciation of such acts provides new ways of knowing about racism and hate crime. Through social interactionism, this knowledge shapes and changes social norms and values. Changing social values and norms surrounding matters of race and ethnicity may heighten public awareness of the potential seriousness of hate crime and may result in social condemnation of and a more punitive attitude towards behaviour that may not have been deemed as morally reprehensible in the past.

As was pointed out previously, the severity ratings and ranking for fraud crimes shows a marked difference for the one-line descriptions as compared to the crime scenario. For the one-line crime descriptions, fraud was considered least wrong and harmful of all four types of crime. However, it must be noted that the difference in wrongfulness ratings between fraud and break and enter was barely significant (p < .05), while the difference for harmfulness between the two was not statistically significant. In addition, the seriousness ratings for fraud results reveal significantly higher severity ratings for fraudulent crimes as opposed to break and enter. In fact, the insignificant difference between fraud and hate crime ratings seems to suggest that for

general perceived seriousness, fraud and hate crimes are considered almost equally serious and second only to assault in terms of the perceived severity level.

These seriousness ratings for fraud seem to contradict the findings from studies by Stylianou (2003) and Adriaenssen et al. (2018) who found that violent crimes were ranked as most serious followed by property crimes with corporate offences being relegated to the least serious ranking. However, Adriaenssen et al. (2018) points out that when considering the components of crime, assessments of wrongfulness match those of overall seriousness in ranking but the severity of harm assessment saw property and corporate offences switch in ranking with property crime being viewed as less harmful than violent and corporate crime. Adriaenssen et al. (2018) as well as Rosenmerkel (2001) suggest that this rating may reflect a sense of awareness as to the potential large-scale harm corporate and environmental crime may have due to their impact on multiple victims. Furthermore, the significant rise of internet use and subsequent scams and instances of identify theft may also play a role in the increased severity ratings for fraud.

Indeed, when considering the small difference between break and enter and fraud for levels of perceived wrongfulness and harmfulness, it seems to suggest awareness may be key to judging perceived seriousness. Further supporting this idea are the striking changes in perceived levels of seriousness, wrongfulness, and harmfulness of fraud when participants were asked to respond to the crime scenarios. In this case, fraud ratings for overall seriousness and harmfulness are second highest to assault. While this change may be due to the scenario used to depict fraud, it may, however, also be illustrative of a general lack of knowledge among the population regarding the actual wrongfulness and harmfulness of fraud. Without a specific and concrete example that illustrates the potential harmfulness and moral wrongfulness of fraud, there may be

a tendency to rate fraud crimes as less morally reprehensible and harmful, even while the severity of fraud is still somewhat acknowledged. Hence the lower observed ratings for fraud in response to the more abstract, one-line crime description.

One last noteworthy observation in response to the severity ranking of crimes is the similarity in perceived levels of severity for hate crimes and fraud. As was noted previously in examining the results from the one-line descriptions, perceived seriousness levels for fraud were not significantly different from those for hate crime. In addition, when looking at the perceived seriousness, wrongfulness and harmfulness of both crime types in the crime scenario condition, it must be noted that these differences are the smallest in magnitude when compared to the mean differences between either one and assault or break and enter. In this instance, a rise in social awareness of hate crimes combined with the increased occurrence of identity theft and computer crime may contribute to this change as well. Furthermore, it may be possible that the education of survey participants may also have played a role in the ranking of hate crime and fraud in contrast to property crimes such as theft. As individuals become more aware of the potential wrongfulness and harmfulness of these types of crimes, attitudes towards these and other crime types shift.

Sentence Severity

Consistent with the argument made by Roberts et al. (2007), the ranking of crimes by suggested sentence severity reveals a pattern identical to that seen in the rankings for severity. Similar to the findings by Michel (2016) and in line with receiving the highest severity ratings, assault also resulted in the most severe sentencing suggestions. Likewise, participants perceived break and enter as the least serious of all four crimes and were also the most lenient in sentencing for the break and enter scenario. To further prove the relevance of perceived seriousness on

punitive attitudes, the insignificant difference between sentence severity for hate crime and propaganda reflects the similarity found between these two crime types in terms of seriousness.

It must be noted here that the 18-month jail sentence prescribed in the break and enter scenario is a relatively harsh sentence, seeing as the number of prior convictions and the value of the items that influenced the sentence were not listed in the scenario. It is possible that participants may have felt that, in light of the scenario description, a sentence of that length was quite severe and may have been more lenient in their responses as a result. However, in reflecting on the mean levels of sentence severity, the trend of responses indicates that participants overwhelmingly tended to lean towards a more punitive sentence than was appointed by the court in all the crime scenarios, including the break and enter scenario. In all four crime scenarios only 7.52% (assault) to 15.86% (break and enter) of participants suggested that the appropriate sentence should be lighter than the sentence meted out in the case scenario. Indeed, in most cases almost 90% of the study sample felt that the sentence should be the same, if not harsher.

While it must be noted that the use of case scenarios limits the generalization, what is striking in this case is the fact that these scenarios are based on real court cases and the sentences described in them are the actual sanctions that were meted out. In relation to this, the above findings seem to suggest that the student population may tend to be more punitive than the Canadian justice system. Furthermore, the close relationship between perceived seriousness and punitive attitudes suggested by these results illustrates the impact perceptions of seriousness can make on punitive attitudes, that may in turn shape criminal justice policy. This illustrates the need to look at factors that may influence and potentially change these perceptions.

Chapter 6: The Influence of Post-Secondary Education

The previous chapter described and discussed how perceptions of crime scenarios vary by crime type. In addition, I also examined the levels of sanction severity participants gave for each crime type. As has been illustrated, there are significant differences in severity ratings and sentencing suggestions between crime types in both the one-line as well as the scenario condition. However, while these results inform us of how different crimes are rated differently, it does not provide information on how post-secondary education influences these attitudes and perceptions or how knowledge might create a change in these levels of perceived crime severity and the appropriateness of the sanctions.

In this chapter I focus on the analyses examining the influence of post-secondary education. More specifically, I wish to know whether perceptions of crime and punitive attitudes of crime are affected by the level of education the participant has completed or by the field of study the student is enrolled in or by a combination of both factors. While examining the influence of post-secondary education is the main goal of this study, the effects of demographic characteristics and prior victimization are measured as well to control for possible confounding effects.

Previous studies on the impact of education on punitive attitudes suggests that exposure to academic knowledge about criminal offences may challenge and change pre-existing perceptions. For example, Falco and Martin (2012) found that students at higher class levels held less punitive views than those at lower levels. Besides the level of education, the field of study student enrolled in has been shown to influence perceptions of crime seriousness as well (Baird et al. 2016; Ridener & Kuehn, 2017; Falco & Martin, 2017).

Drawing on these studies, it was hypothesized that in general, mean levels of perceived seriousness, wrongfulness and harmfulness would differ between lower and higher levels of education. Furthermore, it was argued that this change would be most pronounced in those students majoring in social sciences. The exception for this would be fraud, in which the change in severity ratings was anticipated to be the greatest in business students. In relation to levels of punitiveness, I hypothesized that severity of punishment ratings would decrease as education increases.

Severity Ratings

To examine the influence of the level of education as well as the specific field of study and the interaction between the two variables, multivariate analysis of variance tests were conducted for each crime type in both the one-line as well as the scenario representations. In addition, demographic variables such as age, gender, ethnicity, and prior victimization were added to control for any influence these variables may have on perceptions of seriousness, wrongfulness, and harmfulness. Results for the one-line crime descriptions are displayed in Table 7 while Table 8 describes the outcomes for the crime scenarios. In addition, post hoc analyses were conducted using the Bonferroni procedure to determine which groups differed significantly.

In general, while the field of study had some impact on most measures of seriousness, wrongfulness, and harmfulness; neither the amount of education completed nor the interaction between field of study and the level of education had any significant effect on students' perceptions of crime. Contrary to this, certain demographic variables, in particular gender and ethnicity, appeared to have significant effects on perceptions of crime seriousness, wrongfulness, and harmfulness for most crime types.

 Table 7. GLM Analysis for One-Line Crime Severity Ratings by Levels of Post-Secondary Education and Fields
 of Study.

| | _ | Fraud | | Hate Propag | ganda | Assault | | Break and Enter | |
|-------------------------|----|----------|----------|-------------|----------|---------|----------|-----------------|----------|
| | df | F | η^2 | F | η^2 | F | η^2 | F | η^2 |
| | | | Serio | usness | | | | | |
| Demographics | | | | | | | | | |
| Age | 1 | 7.48** | .01 | 3.24 | .00 | 0.12 | .00 | 1.19 | .00 |
| Gender | 2 | 5.42** | .01 | 14.96 *** | .03 | 6.07** | .01 | 0.52 | .00 |
| Ethnicity | 4 | 5.62*** | .03 | 4.97** | .02 | 1.17 | .01 | 9.18*** | .04 |
| Prior Victimization | 1 | 0.05 | .00 | 0.06 | .00 | 0.59 | .00 | 0.67 | .00 |
| Education | | | | | | | | | |
| Major | 5 | 4.55*** | .03 | 1.69 | .01 | 2.26* | .01 | 5.12*** | .03 |
| Credit Hours | 3 | 0.38 | .00 | 1.50 | .01 | 0.92 | .00 | 1.06 | .00 |
| Major x Credit Hours | 15 | 0.99 | .02 | 1.15 | .02 | 0.84 | .02 | 1.00 | .02 |
| Adjusted R ² | | .06 | | .06 | | .02 | | .06 | |
| Overall model F | 31 | 2.64*** | | 2.88*** | | 1.48* | | 2.70*** | |
| | | | Wrong | gfulness | | | | | |
| Demographics | | | | | | | | | |
| Age | 1 | 1.02 | .00 | 0.35 | .00 | 0.25 | .00 | 0.74 | .00 |
| Gender | 2 | 4.79** | .01 | 11.83*** | .03 | 2.57 | .01 | 6.32** | .02 |
| Ethnicity | 4 | 4.84** | .02 | 3.04* | .01 | 1.95 | .01 | 5.06*** | .02 |
| Prior Victimization | 1 | 0.13 | .00 | 2.59 | .00 | 0.12 | .00 | 0.87 | .00 |
| Education | | | | | | | | | |
| Major | 5 | 3.13** | .02 | 4.79*** | .03 | 2.67* | .02 | 7.23*** | .04 |
| Credit Hours | 3 | 0.20 | .00 | 2.58 | .01 | 0.66 | .00 | 0.08 | .00 |
| Major x Credit Hours | 15 | 0.65 | .01 | 0.84 | .02 | 1.09 | .02 | 1.04 | .02 |
| Adjusted R ² | | .03 | | .06 | | .01 | | .06 | |
| Overall model F | 31 | 1.78** | | 2.94*** | | 1.41 | | 2.91*** | |
| | | | Harm | fulness | | | | | |
| Demographics | | | | | | | | | |
| Age | 1 | 2.56 | .00 | 8.87** | .01 | 5.47* | .01 | 5.36* | .01 |
| Gender | 2 | 1.75 | .00 | 19.93*** | .05 | 6.56** | .02 | 0.20 | .00 |
| Ethnicity | 4 | 11.09*** | .05 | 4.98** | .02 | 1.76 | .01 | 9.81*** | .05 |
| Prior Victimization | 1 | 2.97 | .00 | 1.32 | .00 | 0.10 | .00 | 6.42* | .01 |
| Education | | | | | | | | | |
| Major | 5 | 0.81 | .01 | 2.70* | .02 | 1.28 | .01 | 3.30** | .02 |
| Credit Hours | 3 | 1.45 | .01 | 1.06 | .00 | 1.01 | .00 | 1.12 | .00 |
| Major x Credit Hours | 15 | 1.22 | .02 | 1.09 | .02 | 0.86 | .02 | 1.32 | .02 |
| Adjusted R ² | | .05 | | .08 | | .02 | | .07 | |
| Overall model F | 31 | 2.59*** | | 3.36*** | | 1.56* | | 3.04*** | |

Note: within groups degrees of freedom = 841; *p < .05, **p < .01, ***p < .001.

 Table 8. GLM Analysis for Crime Scenario Severity Ratings by Levels of Post-Secondary Education and Fields of
 Study

| | | Fraud | | Hate Propaganda | | Assault | | Break and Enter | |
|-------------------------|----|---------|----------|-----------------|----------|---------|----------|-----------------|----------|
| | df | F | η^2 | F | η^2 | F | η^2 | F | η^2 |
| | | | Seri | ousness | | | | | |
| Demographics | | | | | | | | | |
| Age | 1 | 0.93 | .00 | 0.44 | .00 | 0.78 | .00 | 1.81 | .00 |
| Gender | 2 | 7.20** | .02 | 15.08*** | .04 | 4.27* | .01 | 1.92 | .01 |
| Ethnicity | 4 | 4.64** | .02 | 6.76*** | .03 | 1.39 | .01 | 5.48*** | .03 |
| Prior Victimization | 1 | 2.05 | .00 | 0.94 | .00 | 0.29 | .00 | 0.28 | .00 |
| Education | | | | | | | | | |
| Major | 5 | 2.03 | .01 | 2.51* | .02 | 2.91* | .02 | 5.05*** | .03 |
| Credit Hours | 3 | 0.32 | .00 | 2.48 | .01 | 0.90 | .00 | 0.63 | .00 |
| Major x Credit Hours | 15 | 1.15 | .02 | 0.84 | .02 | 1.03 | .02 | 0.59 | .0 |
| Adjusted R ² | | .03 | | .07 | | .03 | | .04 | |
| Overall model F | 31 | 1.97** | | 3.12*** | | 1.75** | | 2.04** | |
| | | | Wron | ngfulness | | | | | |
| Demographics | | | | | | | | | |
| Age | 1 | 2.48 | .00 | 0.50 | .00 | 0.47 | .00 | 2.04 | .0 |
| Gender | 2 | 8.78*** | .02 | 16.16*** | .04 | 5.47** | .01 | 7.19** | .0: |
| Ethnicity | 4 | 3.18* | .02 | 2.14 | .01 | 0.24 | .00 | 5.68*** | .0 |
| Prior Victimization | 1 | 0.13 | .00 | 0.03 | .00 | 0.29 | .00 | 0.43 | .0 |
| Education | | | | | | | | | |
| Major | 5 | 1.16 | .01 | 3.16** | .02 | 2.89* | .02 | 5.51*** | .0. |
| Credit Hours | 3 | 0.36 | .00 | 1.78 | .01 | 0.21 | .00 | 0.27 | .0 |
| Major x Credit Hours | 15 | 0.72 | .01 | 1.28 | .02 | 1.41 | .03 | 0.88 | .0 |
| Adjusted R ² | | .02 | | .07 | | .02 | | .05 | |
| Overall model F | 31 | 1.52* | | 2.95*** | | 1.56* | | 2.60*** | |
| | | | Harr | nfulness | | | | | |
| Demographics | | | | | | | | | |
| Age | 1 | 3.54 | .00 | 5.09* | .01 | 1.90 | .00 | 2.82 | .0 |
| Gender | 2 | 2.21 | .01 | 22.05*** | .05 | 4.51* | .01 | 0.49 | .0 |
| Ethnicity | 4 | 3.48** | .02 | 5.74*** | .03 | 1.16 | .01 | 4.70** | .0 |
| Prior Victimization | 1 | 0.78 | .00 | 0.01 | .00 | 0.49 | .00 | .92 | .0 |
| Education | | | | | | | | | |
| Major | 5 | 0.25 | .00 | 3.77** | .02 | 1.55 | .01 | 2.06 | .0 |
| Credit Hours | 3 | 1.08 | .00 | 0.71 | .00 | 0.85 | .00 | 0.16 | .0 |
| Major x Credit Hours | 15 | 0.55 | .01 | 1.06 | .02 | 1.30 | .02 | 0.81 | .0 |
| Adjusted R ² | | .01 | | .09 | | .02 | | .02 | |
| Overall model F | 31 | 1.31 | | 3.73*** | | 1.66* | | 1.53* | |

Note: within groups degrees of freedom = 841; *p < .05, **p < .01, ***p < .001.

One-line Crime Descriptions

Seriousness. Examining the impact of the control variables, the results listed in Table 7 indicate a significant main effect for age on levels of perceived seriousness of fraud, F(1, 841) = 7.48, p < .01. Older participants rated fraud more serious (M = 7.77, SE = 0.21) than those younger than 25 (M = 7.29, SE = 0.17). The age of the participant did not make a significant difference on perceived levels of seriousness for hate crime, assault, or break and enter.

The main effect of gender was significant for perceived levels of seriousness of fraud, F(2, 841) = 5.40, p < .01, as well as hate crime F(2, 841) = 15.00, p < .001, and assault F(2, 841) = 6.07, p < .01, but not for break and enter. Subsequent analyses revealed that women gave the highest ratings of perceived seriousness for fraud, hate crime and assault. Despite the small sample size, the 34 individuals that selected a gender other than woman or man rated fraud significantly less serious (M = 6.75, SE = 0.39) than both women (M = 8.01, SE = 0.14, P < .01) and men (M = 7.84, SE = 0.17, P < .05). There was a significant 11.08 % difference between women and men on levels of perceived seriousness for hate with women reporting higher levels of perceived seriousness (P < 001). Although the difference between the groups was smaller, women still rated assault significantly more serious (M = 8.80, SE = 0.11) than men did (M = 8.37, SE = 0.13, P < .01).

Contrary to the influence of gender, the main effect of ethnicity on perceptions of seriousness was significant for break and enter, F(4,841) = 9.18, p < .001, but not for assault. There was also a significant main effect for ethnicity on perceptions of seriousness for fraud F(4,841) = 5.62, p < .001, and hate crime F(4,841) = 4.97, p < .01. Asian and Black participants reported the highest ratings of seriousness while Caucasian participants held the lowest perceptions of seriousness among all five ethnic groups.

For fraud, Caucasians reported significantly lower ratings of seriousness (M = 7.03, SE = 0.16) than both Black (M = 8.35, SE = 0.35, p < .001), and Asian participants (M = 7.58, SE = 0.20, p < .05). Moreover, they also rated the seriousness of hate crime (M = 7.12, SE = 0.18) significantly lower than Black participants (M = 8.49, SE = 0.40, p < .01). Finally, Caucasian participants reported significantly lower ratings of seriousness for break and enter (M = 6.71, SE = 0.17) than Asian participants (M = 7.76, SE = 0.21, p < .001).

Turning to the variables related to post-secondary education, responses to the one-line crime descriptions indicate a significant main effect for participants' field of study on perceived seriousness levels for fraud, F(5,841) = 4.55, p < .001, assault, F(5,841) = 2.26, p < .05, and break and enter, F(5,841) = 5.12, p < .001. Participants' field of study had no influence on perceptions of seriousness for hate crime.

Post hoc analysis results for perceptions of seriousness, as displayed in Table 9, indicated that participants from the fields of business and education held the highest levels of perceived seriousness for fraud and assault, as well as break and enter. On the opposite side of this spectrum, criminal justice and social science students reported the lowest ratings of perceived seriousness, holding even lower levels of perceived seriousness than science students.

Examining each crime type more closely, results showed that business students perceived fraud as significantly more serious than criminal justice students (p < .05) or social science students (p < .01). Education students, following closely behind business students on mean levels of seriousness, differed significantly from social science students (p < .05). For assault, education students reported the highest ratings on both seriousness while criminal justice students held the lowest levels of perceived seriousness. Indeed, the 7.96% change for levels of seriousness between these two groups shows a small but statistically significant difference, (p < .05)

.05). Following the trend illustrated in fraud and assault, education students also rated break and enter crimes significantly more serious than social science students (p < .001), criminal justice students (p < .01), and even humanities and science students (p < .05).

Table 9. Bonferroni Comparisons of Perceived One-Line Crime Description Seriousness Between Fields of Study.

| | | | | | Mea | Mean Difference | | | | | | | |
|------------------|-----|-------------|---|------|-------|-----------------|--------|---------|--|--|--|--|--|
| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 | | | | | |
| Fraud | | | | | | | | | | | | | |
| Business | 105 | 8.06 (0.25) | - | 0.08 | 0.54 | 0.83 | 0.84* | 0.88** | | | | | |
| Education | 138 | 7.98 (0.24) | | - | 0.46 | 0.75 | 0.76 | 0.80* | | | | | |
| Science | 288 | 7.52 (0.20) | | | - | 0.29 | 0.30 | 0.34 | | | | | |
| Humanities | 93 | 7.23 (0.27) | | | | - | 0.01 | 0.05 | | | | | |
| Criminal Justice | 120 | 7.22 (0.24) | | | | | - | 0.04 | | | | | |
| Social Sciences | 181 | 7.18 (0.21) | | | | | | - | | | | | |
| Assault | | | | | | | | | | | | | |
| Education | 138 | 8.95 (0.19) | - | 0.31 | 0.35 | 0.41 | 0.48 | 0.66* | | | | | |
| Business | 105 | 8.64 (0.20) | | - | 0.04 | 0.10 | 0.17 | 0.35 | | | | | |
| Science | 288 | 8.60 (0.16) | | | - | 0.06 | 0.13 | 0.31 | | | | | |
| Social Sciences | 181 | 8.54 (0.17) | | | | - | 0.07 | 0.25 | | | | | |
| Humanities | 93 | 8.47 (0.21) | | | | | - | 0.18 | | | | | |
| Criminal Justice | 120 | 8.29 (0.19) | | | | | | - | | | | | |
| Break and Enter | | | | | | | | | | | | | |
| Education | 138 | 8.05 (0.25) | - | 0.63 | 0.71* | 0.99* | 1.01** | 1.14*** | | | | | |
| Business | 105 | 7.42 (0.26) | | - | 0.08 | 0.36 | 0.38 | 0.51 | | | | | |
| Science | 288 | 7.34 (0.21) | | | - | 0.28 | 0.30 | 0.43 | | | | | |
| Humanities | 93 | 7.06 (0.28) | | | | - | 0.02 | 0.15 | | | | | |
| Criminal Justice | 120 | 7.04 (0.25) | | | | | - | 0.13 | | | | | |
| Social Sciences | 181 | 6.91 (0.22) | | | | | | - | | | | | |

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

Despite these results, the percentage of variability in perceived levels of seriousness predicted by the overall model was small for each crime type. For perceived seriousness levels of fraud, the overall model significantly predicted 6% (adjusted $R^2 = .06$) of the total variability in perceptions of seriousness, F(31, 841) = 2.64, p < .001. For hate crime, the overall model

accounted for 6% (adjusted $R^2 = .06$) of the total variability in perceptions of seriousness, F(31, 841) = 2.88, p < .001. Furthermore, despite the significant main effects of gender and ethnicity, the overall model only predicted 2% (adjusted $R^2 = .02$) of the total variability in perceptions of seriousness for assault, F(31, 841) = 1.48, p < .05. Finally, only 6% (adjusted $R^2 = .06$) of the total variability in perceived levels of seriousness for break and enter were predicted by the overall model, F(31, 841) = 2.70, p < .001.

Although it appears that the influence of education and demographic characteristics are miniscule on perceived levels of seriousness, one needs to remember that seriousness is an abstract concept informed by perceived notions of moral wrongfulness and harmfulness.

Therefore, it is possible to reason that to observe a difference in perceived seriousness, perceptions of wrongfulness and harmfulness must change. Post-secondary education can challenge social values and bring about changes in perceptions of wrongfulness and perceived harmfulness and thus influence perceptions of seriousness as well. For this reason, it is important to also look at the influence of these variables on perceptions of wrongfulness and harmfulness.

Wrongfulness. In examining the influence of the demographic variables in Table 7, results indicate a significant main effect for gender on measures of wrongfulness for fraud, F(2, 841) = 4.79, p < .01, hate crime, F(2, 841) = 11.83, p < .001, and break and enter F(2, 841) = 6.32, p < .05, but not for assault. Similar to the measures for seriousness of fraud, the 34 individuals that selected a gender other than woman or man rated fraud significantly less morally wrong than women did (M = 7.25, SE = 0.37, p < .05). In general, women reported the highest levels of perceived wrongfulness. For hate crime, the 8.40% difference between men and women in perceived levels of wrongfulness was statistically significant (p < .001). Furthermore, women

also rated break and enter crimes as significantly more wrong (M = 8.51, SE = 0.13) than men (M = 8.15, SE = 0.15) or those of other genders (M = 7.55, SE = 0.15) (p < .05).

In addition to gender, significant main effects were also observed for ethnicity in perceived wrongfulness levels for fraud, F(4,841) = 4.84, p < .01, hate crime, F(4,841) = 3.04, p < .05 as well as break and enter, F(4,841) = 5.06, p < .001, but not for assault. In fact, the only significant main effect on assault is that resulting from students' field of study. Similar to the ratings for perceived seriousness, Black and Asian participants reported higher levels of moral wrongfulness than Caucasian students did. Caucasians rated fraud as significantly less wrongful (M = 7.56, SE = 0.15) than Asians (M = 8.18, SE = 0.19, p < 01). Despite the small number of Black participants, the 11.74% difference in the perceived wrongfulness of hate crime between Black and Caucasian participants was statistically significant as well (p < .05). Regarding the ratings of wrongfulness for break and enter, both the 7.78% mean difference in wrongfulness ratings between Indigenous and Caucasian participants as well as the 6.49% difference between Asian and Caucasian participants was statistically significant (p < .05).

As can be noted in Table 7, a significant main effect for field of study was observed on the reported levels of moral wrongfulness for fraud, F(5,841) = 3.13, p < .01, hate crime, F(5,841) = 4.79, p < .001, assault, F(5,841) = 2.67, p < .05, and break and enter F(5,841) = 7.23, p < .001. As illustrated in Table 10, with the exception of hate crime, education students tend to report the highest ratings of wrongfulness while criminal justice students provided the lowest level of perceived wrongfulness. Consistent with students' perceptions of seriousness, those in the field of education considered fraud most morally reprehensible while criminal justice students held the lowest perceived levels of wrongfulness (p < .01).

Although no significant differences were present for perceptions of seriousness for hate crime, measures of perceived wrongfulness by field of study revealed that students from social science fields reported the highest ratings of wrongfulness while business students reported the lowest ratings. Business students held significantly lower perceptions of wrongfulness for hate crime than students from social sciences (p < .001), education (p < .05), and science fields of study (p < .05). Interestingly enough, criminal justice students and business students did not differ significantly from each other on level of wrongfulness. Furthermore, although smaller in magnitude, the 7.91% difference in perceptions of wrongfulness for assault between education and criminal justice students was statistically different as well (p < .05). It must be noted here that for assault, field of study was the only variable with some significant main effect on perceived wrongfulness.

For the perceived wrongfulness of break and enter, results seem to indicate a split between fields of study with education, business, and science students rating break and enter crime as more wrong than those students in humanities, criminal justice, or social science fields. The was a moderate but statistically significant 14.63% difference between education and social science students, (p < .001). Although smaller, the 9.95% mean difference in wrongfulness ratings between education students and humanities and criminal justice students was also significant, (p < .05). Furthermore, social science students also report significantly lower levels or wrongfulness compared to business students (p < .05) as well as science students (p < .001).

Table 10. Bonferroni Comparisons of Perceived One-Line Crime Description Wrongfulness between Fields of Study.

| | | | | | Mean I | Difference | e | | |
|------------------|-----|-------------|---|------|--------|------------|-------|---------|--|
| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 | |
| Fraud | | | | | | | | | |
| Education | 138 | 8.43 (0.23) | - | 0.41 | 0.49 | 0.64 | 0.80 | 0.85** | |
| Business | 105 | 8.02 (0.24) | | - | 0.08 | 0.23 | 0.39 | 0.44 | |
| Science | 288 | 7.94 (0.19) | | | - | 0.15 | 0.31 | 0.36 | |
| Social Sciences | 181 | 7.79 (0.20) | | | | - | 0.16 | 0.21 | |
| Humanities | 93 | 7.63 (0.26) | | | | | - | 0.05 | |
| Criminal Justice | 120 | 7.58 (0.23) | | | | | | - | |
| Hate Crime | | | | | | | | | |
| Social Sciences | 181 | 8.91 (0.20) | - | 0.08 | 0.22 | 0.58 | 0.80* | 0.89** | |
| Education | 138 | 8.83 (0.22) | | - | 0.14 | 0.50 | 0.72 | 0.81* | |
| Science | 288 | 8.69 (0.19) | | | - | 0.36 | 0.58 | 0.67* | |
| Criminal Justice | 120 | 8.33 (0.23) | | | | - | 0.22 | 0.31 | |
| Humanities | 93 | 8.11 (0.25) | | | | | - | 0.09 | |
| Business | 105 | 8.02 (0.23) | | | | | | - | |
| Assault | | | | | | | | | |
| Education | 138 | 9.23 (0.19) | - | 0.39 | 0.42 | 0.51 | 0.61 | 0.68* | |
| Humanities | 93 | 8.84 (0.21) | | - | 0.03 | 0.12 | 0.22 | 0.29 | |
| Science | 288 | 8.81 (0.16) | | | - | 0.09 | 0.19 | 0.26 | |
| Social Sciences | 181 | 8.72 (0.17) | | | | - | 0.10 | 0.17 | |
| Business | 105 | 8.62 (0.20) | | | | | - | 0.07 | |
| Criminal Justice | 120 | 8.55 (0.19) | | | | | | - | |
| Break and Enter | | | | | | | | | |
| Education | 138 | 8.62 (0.21) | - | 0.30 | 0.34 | 0.78* | 0.78* | 1.10*** | |
| Business | 105 | 8.32 (0.22) | | - | 0.04 | 0.48 | 0.48 | 0.80** | |
| Science | 288 | 8.28 (0.18) | | | - | 0.44 | 0.44 | 0.76*** | |
| Humanities | 93 | 7.84 (0.24) | | | | - | 0.00 | 0.32 | |
| Criminal Justice | 120 | 7.84 (0.22) | | | | | - | 0.32 | |
| Social Sciences | 181 | 7.52 (0.19) | | | | | | | |

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

Results for the overall model revealed a similar pattern to that found in examining perceptions of seriousness. For fraud, 3% (adjusted $R^2 = .03$) of the total variability in perceptions of wrongfulness was explained by the overall model, F(31, 841) = 1.78, p < .01. For

hate crime, the model explained 6% (adjusted $R^2 = .06$) of the total variability in perceived wrongfulness, F(31, 841) = 2.94, p < .001. Despite the significant main effect for field of study on perceptions of wrongfulness, the overall model did not contribute significantly to explaining the variability in perceived wrongfulness for assault (p = .070). Similar to the results for hate crime, the overall model explained 6% (adjusted $R^2 = .06$) of the total variability in perceptions of wrongfulness for break and enter, F(31, 841) = 2.91, p < .001.

Harmfulness. As described in Table 7, perceptions of harmfulness for all four crime types were influenced by the control variables. Contrary to the results for perceived wrongfulness and seriousness, there was a significant effect for age on perceptions of harmfulness for hate crime, F(1,841) = 8.87, p < .01, assault, F(1,841) = 5.47, p < .05, and break and enter F(1,841) = 5.36, p < .05. For all three crime types, older participants reported higher ratings for perceived harmfulness than younger participants with a mean difference of 7.67% for hate crime, 3.61% for assault, and 6% for break and enter. Notably, perceptions of harmfulness for break and enter saw a significant effect for prior victimization with individuals who had be a victim of crime reporting significantly higher ratings of harmfulness (M = 7.34, SE = 0.18) than those who had never been victimized (M = 7.02, SE = 0.21), F(1,841) = 6.42, p < .05. This is the only instance in which prior victimization affected severity ratings to any significant degree.

Gender had a significant impact on reported levels of harmfulness of hate crime, F(2, 841) = 19.93, p < .001 as well as assault, F(2, 841) = 6.56, p < .01, but not for fraud or break and enter. Similar to ratings of seriousness and wrongfulness, women rated hate crime and assault as significantly more harmful than men. With a mean average rating of 8.52 (SE = 0.16), women viewed hate crime as significantly more harmful than men did (M = 7.47, SE = 0.18, p < .001). A mean difference of 4.38% for the perceived harmfulness of assault was also significant (p < .01).

It must be noted that gender was also the only variable that had some effect on levels of harmfulness for assault.

The main effect of ethnicity was significant for the perceived harmfulness of fraud F(4,841) = 11.09, p < .001, hate crime, F(4,841) = 4.98, p < .01, and break and enter, F(4,841) = 9.81, p < .001. Following the trend in perceived levels of seriousness and wrongfulness, Black and Asian participants reported the highest ratings of harmfulness while Caucasians reported the lowest perceptions of harm. For fraud, Caucasians reported significantly lower ratings of harmfulness (M = 6.36, SE = 0.18) compared to Black (M = 7.75, SE = 0.38, p < .05), and Asian participants (M = 7.53, SE = 0.22, p < .001). They also reported significantly lower levels of perceived harmfulness for hate crime (M = 7.24, SE = 0.18) than Black participants (M = 8.55, SE = 0.38, p < .01), as well as Asian participants (M = 7.80, SE = 0.22, p < .05). Furthermore, Caucasian participants also reported statistically lower levels of harmfulness for break and enter (M = 6.65, SE = 0.17) than Asian (M = 7.68, SE = 0.21, p < .001) or Black participants (M = 7.78, SE = 0.37, p < .05).

As described previously, both perceptions of seriousness as well as wrongfulness for all four crime types were influenced by participants' field of study. The only exception to this was noted in levels of seriousness for hate crime, on which field of study had no significant impact. However, reported measures of perceived harmfulness show a slightly different trend and smaller or non-significant effects for field of study. Significant differences between fields of study were observed for perceptions of the harmfulness of hate crime, F(5,841) = 2.70, p < .05, and break and enter, F(5,841) = 3.30, p < .01, but not for the perceived harmfulness of fraud or assault. Similar to the results for perceived wrongfulness, post hoc analyses showed that social

science students reported the highest ratings of harmfulness for hate crime while business students reported the lowest.

As indicated in Table 11, business students reported significantly lower levels of harmfulness for hate crime than students from the social sciences (p < .01). Perceived levels of harmfulness for break and enter across the different fields of study indicated a similar trend to that found in the reported levels of seriousness and wrongfulness, although the differences are less pronounced. Mean levels of perceived harmfulness for education students were significantly higher from those reported by social science students and criminal justice students (p < .01).

Table 11. Bonferroni Comparisons of Perceived One-Line Crime Description Harmfulness Between Fields of Study.

| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------|-----|-------------|---|------|------|------|-------|--------|
| Hate Crime | | | | | | | | |
| Social Sciences | 181 | 8.32 (0.27) | - | 0.35 | 0.35 | 0.49 | 0.64 | 0.98** |
| Science | 288 | 7.97 (0.22) | | - | 0.00 | 0.14 | 0.29 | 0.63 |
| Education | 138 | 7.97 (0.27) | | | - | 0.14 | 0.29 | 0.63 |
| Humanities | 93 | 7.83 (0.30) | | | | - | 0.15 | 0.49 |
| Criminal Justice | 120 | 7.68 (0.27) | | | | | - | 0.34 |
| Business | 105 | 7.34 (0.27) | | | | | | - |
| Break and Enter | | | | | | | | |
| Education | 138 | 7.82 (0.26) | - | 0.56 | 0.63 | 0.64 | 0.76* | 1.08** |
| Business | 105 | 7.26 (0.26) | | - | 0.07 | 0.08 | 0.20 | 0.52 |
| Humanities | 93 | 7.19 (0.29) | | | - | 0.01 | 0.13 | 0.45 |
| Science | 288 | 7.18 (0.22) | | | | - | 0.12 | 0.44 |
| Social Sciences | 181 | 7.06 (0.22) | | | | | - | 0.32 |
| Criminal Justice | 120 | 6.74 (0.26) | | | | | | - |

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

The overall model explained 5% (adjusted $R^2 = .05$) of the total variability in perceived harmfulness for fraud, F(31, 841) = 2.59, p < .001. Of all four crime types the highest portion of variability predicted by the overall model was for hate crime. Here the total model significantly

explained 8% (adjusted $R^2 = .08$) of the total variability in perceptions of harmfulness, F(31, 841) = 3.36, p < .001. Similar to the results for perceptions of seriousness and wrongfulness, the percentage of variability in the perceived harmfulness of assault explained by the overall model was the least significant of all four crime types. For assault, the model only explained 2% (adjusted $R^2 = .02$) of the total variability, F(31, 841) = 1.56, p < .05. Finally, for break and enter, the overall model accounted for 7% (adjusted $R^2 = .07$) of the total variability in perceptions of harmfulness, F(31, 841) = 3.04, p < .001.

Crime Scenarios

Seriousness. The results of the multivariate analyses of education and demographic factors on measures of seriousness, wrongfulness, and harmfulness for all four crime scenarios revealed some similarities as well as differences from the results for the one-line crime scenarios. As seen in Table 8, demographic variables, in particular gender and ethnicity, showed some effects on perceived levels of seriousness as well. Significant main effects were observed for gender on perceptions of seriousness of fraud, F(2, 841) = 7.20, p < .01, hate propaganda, F(2, 841) = 15.08, p < .001, and assault, F(2, 841) = 4.27, p < .05.

Following the trend of responses for the one-line descriptions, women also reported the highest seriousness ratings in each scenario description. Similar to the results for one-line description of fraud, women held statistically higher perceptions of seriousness (M = 8.18, SE = 0.12) than men (M = 7.80, SE = 0.14, p < .01) or those of other genders (M = 7.29, SE = 0.32, p < .05). Women also rated the scenario for hate propaganda more serious (M = 8.13, SE = 0.14) than men did (M = 7.30, SE = 0.16, p < .001). Perceived seriousness of the assault scenario showed a slight deviation from the results for the one-line description with women reporting

significantly higher levels of seriousness (M = 9.20, SE = 0.09) than those participants with a gender other than men or women (M = 8.53, SE = 0.66, p < .05).

Similar to the one-line descriptions, there was a significant main effect for ethnicity on perceptions of seriousness for fraud, F(4, 841) = 4.64, p < .01, hate propaganda F(4, 841) = 6.76, p < .001, and break and enter F(4, 841) = 5.48, p < .001. Black and Asian participants again reported the highest ratings while Caucasians held the lowest ratings for perceived severity. For the seriousness of fraud, the mean difference of 7.44% between Asian and Caucasian participants was statistically significant (p < .01). Responding to the hate propaganda scenario, Caucasian participants reported significantly lower levels of perceived seriousness (M = 7.25, SE = 0.16) than Asian participants (M = 8.01, SE = 0.20, p < .001) or Black participants (M = 8.37, SE = 0.34, p < .01). In this case, the differences are more pronounced than in the one-line description condition. Finally, a 10.17% mean difference between Caucasian and Asian participants for reported severity ratings for break and enter was also statistically significant (p < .01).

In examining perceptions of seriousness, significant main effects were observed for field of study for the hate propaganda, F(5,841) = 2.51, p < .05, assault, F(5,841) = 2.91, p < .05, and break and enter, F(5,841) = 5.05, p < .001. The results for fraud and hate crime differ from those for the one-line condition. Participants' field of study did not influence seriousness perceptions for fraud as it did for the one-line condition. However, unlike the one-line description of hate crime, participants' field of study did show impact on the levels of perceived seriousness for the hate propaganda scenario. What is interesting to note in the following post-hoc analysis is the polarization of social science and criminal justice students in response to the hate propaganda scenario.

Table 12. Bonferroni Comparisons of Perceived Crime Scenario Seriousness Between Fields of Study.

| | | | | Mean Difference | | | | | | |
|------------------|-----|-------------|---|-----------------|------|------|--------|--------|--|--|
| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 | | |
| Hate Crime | | | | | | | | | | |
| Social Sciences | 181 | 8.14 (0.21) | - | 0.28 | 0.36 | 0.57 | 0.64 | 0.73* | | |
| Education | 138 | 7.86 (0.23) | | - | 0.08 | 0.29 | 0.36 | 0.45 | | |
| Science | 288 | 7.78 (0.20) | | | - | 0.21 | 0.28 | 0.37 | | |
| Business | 105 | 7.57 (0.24) | | | | - | 0.07 | 0.16 | | |
| Humanities | 93 | 7.50 (0.26) | | | | | - | 0.09 | | |
| Criminal Justice | 120 | 7.41 (0.24) | | | | | | - | | |
| Assault | | | | | | | | | | |
| Education | 138 | 9.22 (0.15) | - | 0.20 | 0.24 | 0.30 | 0.33 | 0.67** | | |
| Business | 105 | 9.02 (0.16) | | - | 0.04 | 0.10 | 0.13 | 0.47 | | |
| Science | 288 | 8.98 (0.13) | | | - | 0.06 | 0.09 | 0.43 | | |
| Social Sciences | 181 | 8.92 (0.13) | | | | - | 0.03 | 0.37 | | |
| Criminal Justice | 120 | 8.89 (0.15) | | | | | - | 0.34 | | |
| Humanities | 93 | 8.55 (0.17) | | | | | | - | | |
| Break and Enter | | | | | | | | | | |
| Education | 138 | 7.41 (0.22) | - | 0.20 | 0.27 | 0.53 | 0.83** | 0.87** | | |
| Business | 105 | 7.21 (0.23) | | - | 0.07 | 0.33 | 0.63 | 0.67 | | |
| Science | 288 | 7.14 (0.19) | | | - | 0.26 | 0.56 | 0.60* | | |
| Humanities | 93 | 6.88 (0.25) | | | | - | 0.30 | 0.34 | | |
| Criminal Justice | 120 | 6.58 (0.22) | | | | | - | 0.04 | | |
| Social Sciences | 181 | 6.54 (0.19) | | | | | | - | | |

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

As illustrated in Table 12, social science students reported the highest ratings and considered hate crime significantly more serious than criminal justice students (p < .05) who reported the lowest ratings of all fields of study. Results for perceived seriousness levels for the assault scenario and the break and enter scenario were similar to those reported for the one-line description although the difference between groups was more pronounced. Again, education and business students provided the highest ratings of seriousness while criminal justice and humanities students held the lowest levels. Education students held significant higher perceptions of seriousness for assault than students in humanities (p < .01). They also held significantly

higher perceived levels of seriousness for break and enter compared to criminal justice and social science students (p < .01). Interestingly enough, social science students also held significantly lower perceptions of the seriousness of break and enter than science students (p < .05).

Examining and comparing the adjusted R^2 for the overall model between the one-line descriptions and the scenarios some differences appear. In general, and compared to the one-line crime descriptions, the percentage of predicted variability in severity ratings rose for the hate propaganda scenario and the assault scenario but declined for the fraud scenario and the break and enter scenario. In regard to the perceived levels of seriousness for fraud, the overall model explained 3% (adjusted $R^2 = .03$) of the total variability in seriousness ratings, F(31, 841) = 1.97, p < .01. Like the results for the one-line crime descriptions, the highest percentage of predicted variability was again for hate crime. The overall model predicted 7% (adjusted $R^2 = .07$) of the total variability in perceptions of seriousness for hate propaganda, F(31, 841) = 3.12, p < .001. The overall model also significantly predicted 3% (adjusted $R^2 = .03$) of the total variability in seriousness ratings for assault. Finally, for the break and enter scenario, the model predicted 4% (adjusted $R^2 = .04$) of the total variability in the reported levels of perceived seriousness.

Wrongfulness. Examining measures of wrongfulness, the results in Table 8 indicated significant main effects for gender on ratings of perceived wrongfulness for fraud, F(2, 841) = 8.78, p < .001, hate propaganda, F(2, 841) = 16.16, p < .001, assault, F(2, 841) = 5.47, p < .01, and break and enter, F(2, 841) = 7.19, p < .01. Again, women held the highest reported levels of perceived wrongfulness for each crime scenario. Women rated fraud significantly more wrongful (M = 8.87, SE = 0.12) than men (M = 8.40, SE = 0.14, p < .01). With an average level of 9.01 (SE = 0.11) for the perceived wrongfulness of hate propaganda, women differed significantly from men (M = 8.29, SE = 0.13, p < .001). Although gender was not significant for the one-line

description of assault, responses to the assault scenario revealed that those with a gender other than man or woman held significantly lower ratings of perceived wrongfulness (M = 8.61, SE = 0.23) than both men (M = 9.24, SE = 0.10, p < .05) and women (M = 9.36, SE = 0.08, p < .01). Finally, women reported significantly higher ratings of wrongfulness for the break and enter scenario (M = 8.40, SE = 0.12) than men (M = 7.99, SE = 0.15, p < .01) or those of another gender (M = 7.49, SE = 0.34, p < .05).

There was a significant main effect for ethnicity on perceived levels of wrongfulness for fraud, F(4,841) = 3.18, p < .01, as well as break and enter, F(4,841) = 5.68, p < .001, but not for hate propaganda or the assault scenario. Post-hoc analyses revealed that Asian participants rated fraud significantly more wrongful (M = 8.57, SE = 0.16) than Caucasian participants (M = 8.13, SE = 0.13, p < .05). Furthermore, for break and enter Caucasian participants perceived break and enter less morally reprehensible (M = 7.48, SE = 0.14) than Indigenous (M = 8.18, SE = 0.16) or Asian students (M = 8.02, SE = 0.18, p < .01).

The effect of participants' field of study on perceptions of wrongfulness followed the same pattern in perceptions of seriousness. Although no effect was observed for the fraud scenario, there was a main effect of field of study for perceived levels of wrongfulness for hate propaganda, F(5,841) = 3.16, p < .01, assault, F(5,841) = 2.89, p < .05, and break and enter, F(5,841) = 5.51, p < .001. Post-hoc analyses, also displayed in Table 13, show that social science students considered hate propaganda significantly more morally reprehensible than criminal justice and business students (p < .05). These notable findings hold true to the trend observed previously for hate crime in the perceived levels of seriousness for the scenario condition as well as for the one-line description.

Although there was a significant main effect for participants' field of study on perceptions of wrongfulness for assault, post-hoc results using the Bonferroni procedure revealed no statistically significant differences between groups. Indeed, the 5.3% the mean difference between education and humanities students, although the largest difference between groups, was not statistically significant (p = .078). This may partly be due to the small sample of students from humanities (n = 93) and the fact that the Bonferroni procedure is among the most conservative procedures in terms of follow up analyses. In addition, the differences between groups, when significant, are smaller for the responses to the scenarios than for the one-line crime descriptions. For example, in comparing perceived wrongfulness levels for the break and enter scenario, the division of education, business, and science students from those in humanities, criminal justice or social sciences still exists, but is less pronounced.

In this case, social science students reported significantly lower ratings of wrongfulness than education (p < .001), business (p < .05), or science students (p < .01). In addition, criminal justice students differed significantly from education students (p < .05). However, unlike the responses to the one-line description of break and enter, humanities students did not differ significantly from any other group.

Table 13. Bonferroni Comparisons of Perceived Crime Scenario Wrongfulness Between Fields of Study.

| | | | | | Mean l | Difference | | |
|------------------|-----|-------------|---|------|--------|------------|-------|---------|
| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 |
| Hate Crime | | | | | | | | |
| Social Sciences | 181 | 8.98 (0.17) | - | 0.08 | 0.20 | 0.49 | 0.54* | 0.64* |
| Education | 138 | 8.90 (0.20) | | - | 0.12 | 0.41 | 0.46 | 0.56 |
| Science | 288 | 8.78 (0.17) | | | - | 0.29 | 0.34 | 0.44 |
| Humanities | 93 | 8.49 (0.22) | | | | - | 0.05 | 0.15 |
| Criminal Justice | 120 | 8.44 (0.20) | | | | | - | 0.10 |
| Business | 105 | 8.34 (0.20) | | | | | | - |
| Assault | | | | | | | | |
| Education | 138 | 9.34 (0.14) | - | 0.14 | 0.23 | 0.37 | 0.41 | 0.47 |
| Science | 288 | 9.20 (0.12) | | - | 0.09 | 0.23 | 0.27 | 0.33 |
| Business | 105 | 9.11 (0.15) | | | - | 0.14 | 0.18 | 0.24 |
| Social Sciences | 181 | 8.97 (0.13) | | | | - | 0.04 | 0.10 |
| Criminal Justice | 120 | 8.93 (0.14) | | | | | - | 0.06 |
| Humanities | 93 | 8.87 (0.16) | | | | | | - |
| Break and Enter | | | | | | | | |
| Education | 138 | 8.42 (0.21) | - | 0.24 | 0.27 | 0.58 | 0.74* | 0.93*** |
| Business | 105 | 8.18 (0.22) | | - | 0.03 | 0.34 | 0.50 | 0.69* |
| Science | 288 | 8.15 (0.18) | | | - | 0.31 | 0.47 | 0.66** |
| Humanities | 93 | 7.84 (0.24) | | | | - | 0.16 | 0.35 |
| Criminal Justice | 120 | 7.68 (0.21) | | | | | - | 0.19 |
| Social Sciences | 181 | 7.49 (0.18) | | | | | | - |

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

Similar to the measures of seriousness, the percentage of predicted variability in wrongfulness ratings rose for the hate propaganda scenario and the assault scenario but declined for the fraud scenario and the break and enter scenario compared to the ratings for the one-line description. For fraud, the percentage of variability in perceptions of wrongfulness predicted by the model dropped to a barely significant 2% (adjusted $R^2 = .02$) in response to the scenario, F(31, 841) = 1.52, p < .05. For the hate propaganda scenario, the overall model predicted a significant 7% (adjusted $R^2 = .07$) of the total variability in perceived wrongfulness, F(31, 841) = 2.95, p < .001. Contrary to the results for the one-line description of assault, the overall model

predicted a miniscule but significant 2% (adjusted R^2 = .02) of the total variability in perceptions of wrongfulness for the assault scenario, F(31, 841) = 1.56, p < .05. For the break and enter scenario, the overall model predicted 5% (adjusted R^2 = .05) of the total variability in perceived wrongfulness, F(31, 841) = 2.60, p < .001.

Harmfulness. Contrary to the results for perceived levels of harmfulness in the one-line condition, age was only significant on perceived levels of harm for hate propaganda with older students rating hate propaganda as significantly more harmful (M = 7.69, SE = 0.21) than those younger than 25 (M = 7.29, SE = 0.17), F(1, 841) = 5.09, p < .05. Similar to the one-line description condition, gender had a significant main effect on perceived levels of harm for the hate propaganda scenario, F(2, 841) 22.05, p < .001, as well as the assault scenario, F(2, 841) = 4.51, p < .05. For the hate propaganda scenario, the moderate 15.02% difference between woman and men was statistically significant with women reporting higher ratings of wrongfulness (p < .001). For assault, woman reported significantly higher levels of wrongfulness (M = 9.31, SE = 0.09) than men did, (M = 9.02, SE = 0.11, p < .05).

Similar to the one-line descriptions, there was a main effect for ethnicity on ratings of harmfulness for fraud, F(4,841) = 3.48, p < .01, hate propaganda, F(4,841) = 5.74, p < .001, and break and enter, F(4,841) = 4.69, p < .01. Nevertheless, it must be noted that, although the trend is similar to that of the one-line descriptions with Black and Asian participants reporting the highest ratings and Caucasian participants reporting the lowest ratings, the differences between groups is reduced. Despite the significant overall main effect, post-hoc analyses using the more conservative Bonferroni procedure for the different ethnic groups did not reveal any significant differences in perceived levels of harmfulness in the fraud scenario. Perceptions of the harmfulness of hate propaganda saw Asian participants reporting significantly higher levels of

perceived harmfulness (M = 7.80, SE = 0.21) than Caucasian participants (M = 7.02, SE = 0.16, p < .001). Asians also reported significantly higher levels of perceived harmfulness regarding the break and enter scenario, (M = 6.72, SE = 0.21), than Caucasian participants, (M = 6.03, SE = 0.17, p < .01).

Participants' field of study had an even lower impact on perceived harmfulness in the scenario condition than for the one-line crime descriptions. The only significant main effect for field of study was on the perceived harmfulness of hate propaganda, F(5,841) = 3.77, p < .01. However, as indicated in Table 13, there was an even greater polarization between social science students and students from the fields of criminal justice and business for the perceived harmfulness of hate propaganda than for the measures of seriousness and wrongfulness in addition to the severity ratings in the one-line condition. Results indicate that social science students differed significantly from criminal justice and business students of levels of perceived harmfulness in response to the hate propaganda scenario (p < .01).

Table 14. Bonferroni Comparisons of Perceived Crime Scenario Harmfulness Between Fields of Study.

| | | _ | Mean Difference | | | | | | |
|------------------|-----|-------------|-----------------|------|------|------|--------|--------|--|
| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 | |
| Hate Crime | | | | | | | | | |
| Social Sciences | 181 | 8.08 (0.22) | - | 0.44 | 0.57 | 0.70 | 0.88** | 0.96** | |
| Education | 138 | 7.64 (0.25) | | - | 0.13 | 0.26 | 0.44 | 0.52 | |
| Science | 288 | 7.51 (0.21) | | | - | 0.13 | 0.31 | 0.39 | |
| Humanities | 93 | 7.38 (0.28) | | | | - | 0.18 | 0.26 | |
| Criminal Justice | 120 | 7.20 (0.25) | | | | | - | 0.08 | |
| Business | 105 | 7.12 (0.25) | | | | | | - | |

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

Following the trend seen in perceptions of seriousness and wrongfulness for the crime scenarios, the percentage of predicted variability increased for hate propaganda as well as assault and decreased noticeably for fraud and break and enter compared to the one-line crime

descriptions. Indeed, the percentage of predicted variability in harmfulness scores for fraud dropped from a significant 5% (p < .001) for the one-line description to an insignificant 1% (adjusted $R^2 = .01$) for the scenario, F(31, 841) = 1.31, p = .123, despite the significant main effect of ethnicity. For the perceived harmfulness of hate propaganda, the overall model significantly predicted 9% (adjusted $R^2 = .09$) of the total variability in the reported levels of harmfulness, F(31, 841) = 3.73, p < .001. The results for assault showed that the overall model could significantly explain 2% (adjusted $R^2 = .02$) of the total variability in perceptions of harmfulness for assault, F(31, 841) = 1.66, p < .05. Finally, in a sharp drop from the 7% of predicted variability explained by the overall model for the one-line description, the model only predicted 2% (adjusted $R^2 = .02$) of the perceived harmfulness for the break and enter scenario, F(31, 841) = 1.53, p < .05.

Sentence Severity

In addition to examining the influence of education on perceptions of crime, the impact of post-secondary education on attitudes towards sentencing was also examined. As was pointed out in the previous section, participants tended to recommend a similar or harsher sentence than what was meted out in the scenario. The question addressed in this section is whether the amount of post-secondary education would influence these responses and whether the participants' field of study would also impact the sentence recommendations. Following a similar approach as was taken for the severity ratings, multivariate tests of analyses were conducted for each crime scenario to examine the influence of educational variables of participants' sentence recommendations. In addition, demographic characteristics were again included as control variables. The results of the analyses are displayed in Table 15.

Table 15. GLM Analysis for Sentence Severity Ratings by Levels of Post-Secondary Education and Fields of Study.

| | | Fraud | | Hate Propaganda | | Assault | | Break and Enter | |
|-------------------------|--------|-------|----------|-----------------|----------|---------|----------|--------------------|----------|
| | df | F | η^2 | F | η^2 | F | η^2 | F | η^2 |
| Education Variables | | | | | | | | | |
| Major | 5 | 0.67 | .00 | 3.24** | .02 | 4.59*** | .03 | 4.29** | .03 |
| Credit Hours | 3 1 | 0.73 | .00 | 0.88 | .00 | 0.86 | .00 | 1.28 | .01 |
| Major x Credit Hours | 5 | 1.07 | .02 | 0.94 | .02 | 1.59 | .03 | 1.80* | .03 |
| Control Variables | | | | | | | | | |
| Age | 1 | 0.23 | .00 | 0.40 | .00 | 1.68 | .00 | 0.05 | .00 |
| Gender | 2 | 0.32 | .00 | 16.73*** | .04 | 0.68 | .00 | 1.12 | .00 |
| Ethnicity | 4 | 0.72 | .00 | 1.60 | .01 | 1.16 | .01 | 0.85 | .00 |
| Prior Victimization | 1 | 0.00 | .00 | 0.65 | .00 | 0.52 | .00 | 0.68 | .00 |
| Adjusted R ² | 3 | 01 | | .05 | | .04 | | .03 | |
| Overall model F | 1 | 0.86 | | 2.58*** | | 2.16*** | | 1.90** | |

Note: within groups degrees of freedom = 841;

The first thing to note is that none of the variables had any significant effect on the sentence recommendations for the fraud scenario although, as pointed out in the previous chapter, participants still tended to feel that the sentence should have been somewhat harsher than what was prescribed by the court $(M = 3.49, SE = 0.90)^4$. Contrary to the results for severity ratings, the demographic characteristics of participants had little effect on their attitudes towards punishment. The only significant main effect for a demographic variable was observed for gender in response to the sentence suggestions for hate propaganda, F(2, 841) = 16.73, p < .001. Not surprisingly, post-hoc analyses indicated that women recommended a significantly harsher sentence in response to the scenario (M = 3.67, SE = 0.06) than men did (M = 3.27, SE = 0.07, p < .007)

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

⁴ Measured on a scale of 1 to 5 with 1 being a much lighter sentence and 5 being a much harsher sentence and 3 being the midpoint in which the sentence meted out in the scenario is deemed appropriate.

.001). Neither age, ethnicity, nor prior victimization showed any significant influence on participants' sentencing recommendations. However, similar to the results for severity ratings, participants' field of study had some impact on students' sentence recommendations. More specifically, there was a significant main effect of field of study on the recommended sentence for hate propaganda, F(5, 841) = 3.24, p < .01, assault, F(5, 841) = 4.59, p < .001, and break and enter, F(5, 841) = 4.29, p < .01.

Subsequent post-hoc analyses employing the Bonferroni procedure indicated that from all six fields of study, criminal justice students tended to view the sentence prescribed by the courts as mostly appropriate compared to students from other fields who suggested harsher sentences (see Table 16). For the hate propaganda scenario, the sentencing recommendations by the different fields of study reflected the pattern found for severity ratings for the scenarios with social science students being the most punitive and criminal justice students the least punitive. Indeed, the 12.35% difference between social science students and participants from the field of criminal justice proved to be statistically significant (p < .01).

Similar to the results for the severity of assault, education students also made the harshest sentencing recommendations in response to the assault scenario while criminal justice students gave the most lenient sentencing suggestions. Specifically, participants from the field of education suggested a significantly harsher sentence than social science students and criminal justice students, (p < .01). Furthermore, although the mean difference (0.33) between humanities and criminal justice participants was not significant, the 10.03% difference between science and criminal justice students was significant (p < .05).

Sentencing recommendations per field of study for the break and enter scenario followed the trend displayed in the severity ratings. Humanities and education students suggested the harshest sentences while those in the fields of criminal justice and social science recommended more lenient approaches. Indeed, criminal justice students on average leaned towards a lighter sentence than what was prescribed in by the court in the scenario. In comparing the differences between groups, education students were significantly more punitive than social science and criminal justice participants, (p < .05). Furthermore, participants in social science and criminal justice fields were also more lenient than science students (.05).

Table 16. Bonferroni Comparisons of Sentence Severity Between Fields of Study.

| | | | | | Mea | n Differei | nce | |
|------------------|-----|-------------|---|------|------|------------|--------|--------|
| | n | M (SE) | 1 | 2 | 3 | 4 | 5 | 6 |
| Hate Crime | | | | | | | | |
| Social Sciences | 181 | 3.73 (0.09) | - | 0.16 | 0.20 | 0.23 | 0.27 | 0.41** |
| Business | 105 | 3.57 (0.11) | | - | 0.04 | 0.07 | 0.11 | 0.25 |
| Education | 138 | 3.53 (0.11) | | | - | 0.03 | 0.07 | 0.21 |
| Science | 288 | 3.50 (0.09) | | | | - | 0.04 | 0.18 |
| Humanities | 93 | 3.46 (0.12) | | | | | - | 0.14 |
| Criminal Justice | 120 | 3.32 (0.11) | | | | | | - |
| Assault | | | | | | | | |
| Education | 138 | 3.74 (0.11) | - | 0.12 | 0.12 | 0.19 | 0.38** | 0.45** |
| Humanities | 93 | 3.62 (0.12) | | - | 0.00 | 0.07 | 0.26 | 0.33 |
| Science | 288 | 3.62 (0.09) | | | - | 0.07 | 0.26 | 0.33* |
| Business | 105 | 3.55 (0.12) | | | | - | 0.19 | 0.26 |
| Social Sciences | 181 | 3.36 (0.10) | | | | | - | 0.07 |
| Criminal Justice | 120 | 3.29 (0.11) | | | | | | - |
| Break and Enter | | | | | | | | |
| Humanities | 93 | 3.31 (0.11) | - | 0.01 | 0.02 | 0.07 | 0.28 | 0.34 |
| Education | 138 | 3.30 (0.10) | | - | 0.01 | 0.06 | 0.27 | 0.33* |
| Science | 288 | 3.29 (0.09) | | | - | 0.05 | 0.26* | 0.32* |
| Business | 105 | 3.24 (0.10) | | | | - | 0.21 | 0.27 |
| Social Sciences | 181 | 3.03 (0.09) | | | | | - | 0.06 |
| Criminal Justice | 120 | 2.97 (0.10) | | | | | | |

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

Similar to the multivariate analyses results for crime severity, the number of credit hours had no significant main effect on the sentencing recommendations for any of the four crime

scenarios. However, the interaction between field of study and the number of credit hours taken revealed a small but significant main effect on attitudes towards sentencing, F(15, 841) = 1.80, p < .05). Subsequent analyses revealed that there was a significant simple effect for credit hours on sentence recommendations within criminal justice participants, F(3, 841) = 5.50, p < .001.

Bonferroni analyses done on the difference in sentence suggestions for different credit hour range groups within the field of criminal justice revealed that participants in the highest credit hour range group (90 credit hours and up) were significantly more lenient in sentencing than those participants ranging between 61 to 90 credit hours (p < .001). In addition, there was a moderate 24.10% difference between students in the highest categories and those within the range of 0 to 30 credit hours that was close to being statistically significant (p = .051). Indeed, it must be noted that students with the highest amount of credit hours on average suggested a sentence that tended to support or be even more lenient than the sentence prescribed by the court in the scenario (see Table 17).

Table 17. Bonferroni Comparisons of Break and Enter Sentence Severity Between Levels of Education for Criminal Justice Students.

| Credit Hours | n | M (SE) | 0 - 30 | 31 - 60 | 61 - 90 | 90 and up |
|--------------|----|-------------|--------|---------|---------|-----------|
| 0 - 30 | 32 | 3.09 (0.17) | - | 0.14 | - 0.27 | 0.60 |
| 31 - 60 | 24 | 2.95 (0.18) | | - | - 0.41 | 0.46 |
| 61 - 90 | 39 | 3.36 (0.15) | | | - | 0.87*** |
| 90 and up | 25 | 2.49 (0.18) | | | | _ |

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

Despite the significant effects of both educational as well as demographic variables, the overall model shows low levels of variance accounted for. It must be noted that similar to the results for crime severity the percentage of predicted variability in sentence recommendations

was the highest for the hate propaganda. In this instance, the overall model predicted 5% (adjusted $R^2 = .05$) of the total variability in sentence recommendations for hate propaganda, F(31, 841) = 2.58, p < .001. For assault, the model predicted 4% (adjusted $R^2 = .04$) of the total variability in sentence suggestions, F(31, 841) = 2.16, p < .001. Lastly, for break and enter, the overall model significantly predicted 3% (adjusted $R^2 = .03$) of the variability found in the recommended sentence, F(31, 841) = 1.87, p < .01.

Discussion

Severity Ratings

Considering the above findings, it must be noted that despite significant findings, the overall model only explained between 1% (wrongfulness of assault) and 8% (harmfulness of hate crime) of the total variability in severity ratings for the generic crime descriptions. For the scenario descriptions these values go even lower with the explained variability in severity ratings ranging from an insignificant 1% (harmfulness of fraud) to 9% (harmfulness of hate crime). In general, the model showed the highest rates of predicted variability for hate crimes and break and enter. It could be suggested that the reason for this can be attributed to the potential social nature of hate crimes and the social factors that might drive break and enter crimes whereas for assault a more universal idea of severity exists and fraudulent crimes are more ambiguous.

Nevertheless, the low impact of educational and demographic factors on measures of crime severity are not unusual. Indeed, in examining the influence of wrongfulness and harmfulness, Adriaenssen et al. (2018) noted that noted that demographic and educational variables had little or no impact on seriousness ratings. However, despite the low overall significance, the differences observed are still noteworthy and important to review.

Consistent with prior studies (Baird et al. 2016; Ridener & Kuehn, 2017; Falco & Martin, 2017) the examination of the influence of post-secondary education on perceptions of crime and attitudes toward punishment revealed that participants' field of study had some impact on levels of seriousness, wrongfulness, and harmfulness for most crime types. For fraud, there were some differences between fields of study regarding the seriousness and wrongfulness of the one-line description. Interestingly enough, this effect disappeared with the scenario representation of fraud.

Results for hate crime indicated a steady influence of participants' field of study for all measures of crime severity in both forms of crime representation, with the exception of seriousness levels in the one-line description. For assault, field of study only impacted levels of seriousness and wrongfulness but failed to show any difference for perceptions of harmfulness. It can be argued that in light of the violent nature of assault, there is a more universal agreement on the level of harm caused by assault than there would be for crimes with stronger social components like hate crime or break and enter. Finally, for break and enter, with the exception of perceived harm for the scenario condition, students responded differently to all measures of severity depending on their field of study.

Examining the differences between fields of study more closely, it can be noted that in line with the findings of Baird et al. (2016), business students reported the highest ratings of seriousness for fraud while criminal justice students were located at the lower end. This finding is consistent with the suggestion that business students would rate fraud crimes most serious due to a greater awareness of their impact, especially in the business world. However, in general and with the exception of hate crimes, education students tended to report the highest severity ratings while criminal justice on average reported the lowest ratings.

Interesting to note is the split between education, business and science majors and humanities, social sciences, and criminal justice students on levels of perceived wrongfulness of break and enter observed in both the generic description as well as the scenario. The lower levels of perceived wrongfulness in the latter group may suggest an engagement with and a recognition of wider social factors that may drive individuals to commit theft. Also of interest are the responses to hate crime indicating that students in social science majors reported the highest levels of perceived severity. Most noteworthy in this instance, is the fact that criminal justice majors reported significantly lower levels of severity than those in social sciences. In fact, criminal justice majors and business students were similar in perceptions of severity in regard to hate crime. Considering the fact that the study of criminal justice is considered an area in social science, these results refute the notion of similarity in terms of attitudes and opinions between criminology majors and other social science majors.

Contrary to my hypothesis and the relevant findings from Adriaenssen, Karstedt, et al. (2019) on perceived levels of seriousness, no effect was found for the level of education.

Students held the same average ratings of seriousness regardless of the number of credit hours completed. Based on these results, it would seem that students enter each field with preconceived notions and post-secondary education does little to change these perceptions and attitudes (Kuehn et al., 2018). Alternatively, this could also be explained by pointing out that the difference between certain fields of studies can be attributed to the fact that students who enter certain fields such as criminal justice, do so because of an interest in the subject. Consequently, it could be expected that these individuals would be more engaged with certain social issues surrounding crimes and therefore have more knowledge and differing opinions on different

measures of severity. This reasoning is also consistent with social constructionism and the theory of social interaction.

Perceptions are shaped through ways of knowing that are formed through the symbolic interaction of social values, attitudes, and norms that shape a person. Factors in the student's background, like parents, peers, or events, combined with the social values and norms an individual was raised with may influence the student's choice of major. In relation to criminal justice students, these background factors, values, and norms may lead to a heightened interest in the subject of crime and social issues. This interest may lead to the exposure of different representations of crime as criminal justice students engage with multiple different sources of knowledge of crime. Students from other fields, like science, whose interests have also been shaped by background factors, social norms, and social values, may perhaps not be as interested in or engaged with social issues like crime. Hence, these students may not be exposed to as many different representations of crime. This difference in socialization on issues surrounding crime may be the cause for the significant different ratings between fields of study, despite the lack of effect for the level of education.

In comparing perceptions of seriousness, wrongfulness, and harmfulness between different groups for each crime type it can be noted that while the general trends are similar in terms of what is most wrong, there seems to be the possibility of other factors that play a role as well. For example, while there were significant differences between fields of study for the wrongfulness and harmfulness of hate crime, none were observed for levels of seriousness. This suggests that perceptions of moral wrongfulness and harmfulness may also be somewhat independent of perceptions of seriousness. In other words, students from certain fields of study

may use different factors to determine the levels of seriousness besides their perceptions of wrongfulness and harmfulness.

Nevertheless, the comparison of the results for different crime representations emphasizes the relevance of wrongfulness and harmfulness in creating perceptions of seriousness. Although there was variation in terms of the strength of the effects between the generic one-line and the scenario condition, the trend and pattern of the results across crime types and different fields of study remained similar. As mentioned before, caution needs to be taken with comparing results from the generic crime descriptions to those given in response to the highly specific crime scenarios. However, similar patterns of results seem to indicate universal ideas of right and wrong, particularly for more serious crimes. These findings are also consistent with the observations made in prior studies indicating a relative cross-cultural consensus with respect of crime ranking high in seriousness which are typically those involving violence and bodily injury (O'Connell & Whelan, 1996; Stylianou, 2003).

Related to this, it must be observed that the impact of the model was the least significant for harmfulness. In comparison with the one-line descriptions of crime, the impact of the model on perceptions of harmfulness dropped drastically for some of the crime scenarios. In particular, the percentage of predicted variability for the model for fraud went from 5% down to 1% while for break and enter it dropped from 7% to 2%. Considering the strong influence of harmfulness on levels of seriousness observed in chapter four, in can be argued that there is some consistent knowledge of moral wrongfulness for most crimes regardless of the situational factors, but there appears to be some confusion as to the inherent harmfulness of certain crimes in the generic one-line condition.

Although they were included in the model as control variables, a brief overview of the influence of age, ethnicity, gender, and victimization may be beneficial to provide a fuller understanding of their effects. In regard to age, those who were older tended to report higher severity ratings than those in the younger age category. Consistent with the results from other studies (Adriaenssen, Karstedt, et al., 2019; Rossi et al., 1974; Vogel & Meeker, 2001), women give higher ratings than men, although it is important to keep in mind here the problems with certain respondents using a Likert scale differently from others (O'Connell & Whelan, 1996).

With the exception in the case of the generic description of break and enter, prior victimization had no impact on severity ratings. This result is consistent with research done by Adriaenssen et al. (2018) who noted no significant impact of victimization on perceptions of crime seriousness. Regarding ethnicity, results indicated that Caucasians provided the lowest severity ratings while Asians and Black participants reported the highest levels of severity. These results coincide with findings regarding the influence of ethnicity and gender in previous studies (Adriaenssen, Karstedt, et al., 2019; Vogel & Meeker, 2001). Interestingly enough, while these demographic variables showed some significant influence on severity ratings, they had no effect on the ratings for sentence appropriateness.

Sentence Severity

Contrary to the results for perceived seriousness, demographic variables and prior victimization had little to no impact on participants' responses regarding the appropriateness of the sanction described in the scenario. The only exception to this was in response to the hate crime scenario. Here women suggested a higher sentence than men.

Nevertheless, educational variables did show some effect. Specifically, there was an influence of field of study for hate crime, assault, as well as break and enter. Differences

between groups showed patterns similar to that found in relation to the severity ratings. With the exception of hate crime, education and humanities students recommended the most severe sanctions. Reflecting the results for severity ratings, social science majors rated highest on sentence severity for hate crime. Consistent with my hypothesis and the findings in the literature (Falco & Martin, 2012; Ridener & Kuehn, 2017; Kuehn et al., 2018), criminal justice students were the least punitive of all groups for all three crimes. Indeed, compared to other groups, criminal justice students were most likely to recommend a sentence similar to the one described in the scenario.

One way of interpreting these results is to note, as mentioned before, that, unlike other majors, criminal justice students by virtue of the subject are frequently exposed to matters surrounding judicial decisions, sentencing, and incarceration. From a different perspective, one could also argue that these results may have been influenced by the survey design. Since the scenarios used in the questionnaire were actual cases cited by their legal citation, criminal justice students may have noted the legitimacy of the sentence and might have been less likely to question its' appropriateness.

Indeed, while criminal justice students already showed separation from other social science majors regarding severity ratings, these differences are further emphasized when examining the influence of education on sentencing severity. As has been pointed out, neither the amount of post-secondary education completed nor the interaction between level of education and field of study showed any significant impact on measures of crime severity. However, despite the fact that this pattern seems to repeat itself in relation to sentencing severity, a significant interaction effect was observed for field of study with level of education on suggested sentence severity for break and enter. As noted in the results, this interaction was only of

significance for criminal justice majors. More specifically, students with the highest amount of credit hours supported the scenario sentence or prescribed a more lenient sanction.

When reviewing these results specific to the break and enter scenario, a word of caution must be added. As has been mentioned previously, the number of prior convictions for the offender and the value of the items stolen were not mentioned in the scenario. Furthermore, even considering these factors, it must be noted that the 18-month sentence prescribed by the court in this case was likely more punitive than the norm. This fact may have influenced students, particularly those in higher level courses with perhaps more knowledge regarding appropriate sentencing lengths, to be more lenient in this instance. Despite this, it must be noted that students overwhelmingly still viewed the prescribed sentence as mostly appropriate despite its severity thereby suggesting that students tend to indeed be more punitive than the criminal justice system.

Interestingly enough, students falling in the category just below 90 credit hours were the most punitive, suggesting perhaps a turning point in attitudes towards punishment due to participants taking higher level courses. At the University of Winnipeg, higher level courses offered by the department of criminal justice are often formed as seminars with a significant amount of participation and class discussion around theoretical principals. A deeper engagement with issues of justice, knowledge of alternative options to incarceration, and a more critical exploration of the criminal justice system by the students themselves perhaps has a stronger influence on punitive attitudes than the more traditional lecture-based courses found in the lower levels. However, it is also possible that, similar to the social and background factors influencing a student's choice to major in criminal justice, students with more credit hours tend to select for that level of learning because they are more engaged in critical criminal justice topics. Hence it is possible that the results noted is partially due to a selection effect with students that are more

engaged in a deeper, theoretical, and critical view of the criminal justice system choosing to take more courses.

Nevertheless, these results contradict the findings made by Kuehn and colleagues (2018) who concluded that taking criminology classes made no difference on students' level of punitiveness and confirm the hypothesis that the interaction between level of education and field of study will influence attitudes towards punishment. Having said that, one needs to keep in mind that these results stem from respondents' reaction to a very specific crime scenario and may not be generalizable, especially considering the fact that no significant interaction was observed for the more generic description of break and enter. In addition, as mentioned already, this particular scenario sentence may have been biased in terms of punitively.

Indeed, perhaps students from higher levels analysed the situational factors in the scenario differently than those students from lower levels and thus gave different sentencing recommendations. However, in that case one could still argue the effect of post-secondary education on the thought processes that guide sentencing recommendations. Furthermore, even if these results are not generalizable to other situations, from a social constructionist viewpoint they speak to the potential influence of crime representation and social interaction on social constructions of reality, social perceptions of crime, and attitudes and behaviours towards crime.

Chapter 7: The Influence of Crime Representation in Survey Design

In the previous section I discussed the impact of post-secondary education on perceptions of crime and punitive attitudes. Although field of study had a significant impact on the way students reacted to crime, the level of education did not have as much impact. Despite general trends in the perceptions and attitudes towards crime, the results do indicate that some differences exist between reactions to the generic crime descriptions versus those made in consideration of the crime scenarios depicting similar crime types. In this chapter I wish to examine these differences between crime representation types more closely.

Academic studies have suggested the importance of reflecting on the method of crime representation and description in academic research on perceptions and punitive attitudes towards crime, demonstrating the impact of scenario variables such as victim and offender age and ethnicity on levels of crime seriousness (Vogel & Meeker, 2001; Bensimon & Bodner, 2012; Herzog, 2003; Doob & Roberts, 1984). Prior studies examining perceptions of crime seriousness have employed both one-line crime descriptions were participants are simply asked to provide a rating for a certain type of crime based on a generic description (Rossi et al., 1974; Warr, 1989; Rosenmerkel, 2001; Adriaenssen et al., 2018; Adriaenssen, Karstedt, et al., 2019) as well as detailed crime scenarios that provide participants with more context (Rossi et al., 1985; O'Connell & Whelan, 1996; Einat & Herzog, 2011; Baird et al., 2016; Michel, 2016; Roberts et al., 2007).

Nevertheless, little consideration has been given to the possible impact of these differing designs on seriousness ratings. For example, there exists the possibility of introducing confounding variables into the study when using more descriptive crime scenarios. However, Lynch & Danner (1993) note that one-line descriptions of crime that avoid the inclusion of these

characteristics are not without problems either. One-line scenarios suffer from 'filling in the blanks' behaviour and a priori assumptions in which respondents make assumptions about the variables surrounding the crime (Lynch & Danner, 1993). In relation to these issues and in consideration of the theoretical approach this research takes, I thought it important to examine the influence of crime representation in the research itself. Regarding the influence of crime representation on crime severity ratings, I argued that the mean rate of seriousness for one-line crime descriptions would differ when compared to the more detailed scenarios.

Results

To examine in the impact of crime representation in survey design on perceptions of crime, survey participants were exposed to both one-line crime descriptions asking respondents to simply rate the level of seriousness for assault, fraud, hate crime and theft as well as more detailed scenarios that described an event in which this type of crime occurred on a scale of 1 to 10. Prior analyses have already illustrated differences between the results for one-line crime descriptions and crime scenarios. A paired sample t-test comparing mean levels of seriousness, wrongfulness, and harmfulness for each crime type across different crime representations revealed that these differences are indeed significant in some cases (See Table 18).

| Table 18. Mean Levels of Serior | isness. Wrongfulness and | Harmfulness by Crime | e Type and Representation Type |
|--|--------------------------|----------------------|--------------------------------|
|--|--------------------------|----------------------|--------------------------------|

| _ | One-line o | lescription | Scer | nario | _ | |
|-----------------------|------------|-------------|------|-------|----------|--|
| Crime Type | M | SD | M | SD | t(970) | |
| Fraud | | | | | | |
| Seriousness | 7.47 | 2.07 | 7.92 | 1.69 | 7.72*** | |
| Wrongfulness | 8.05 | 1.95 | 8.45 | 1.65 | 7.15*** | |
| Harmfulness | 6.90 | 2.26 | 7.77 | 1.87 | 12.91*** | |
| Hate Propaganda | | | | | | |
| Seriousness | 7.63 | 2.34 | 7.69 | 2.02 | 0.88 | |
| Wrongfulness | 8.63 | 1.94 | 8.67 | 1.68 | 0.87 | |
| Harmfulness | 7.74 | 2.30 | 7.43 | 2.14 | 5.04*** | |
| Assault | | | | | | |
| Seriousness | 8.61 | 1.61 | 9.12 | 1.29 | 10.74*** | |
| Wrongfulness | 8.77 | 1.62 | 9.27 | 1.23 | 10.42*** | |
| Harmfulness | 8.81 | 1.53 | 9.26 | 1.35 | 9.08*** | |
| Break and Enter/Theft | | | | | | |
| Seriousness | 7.17 | 2.14 | 6.88 | 1.87 | 5.08*** | |
| Wrongfulness | 8.21 | 1.83 | 7.97 | 1.78 | 4.89*** | |
| Harmfulness | 7.01 | 2.22 | 6.30 | 2.11 | 10.48*** | |

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

When comparing ratings for the seriousness of fraud, the mean rating for seriousness was significantly higher for the scenario description (M = 7.92, SD = 1.69) as compared to the one-line description (M = 7.47, SD = 2.07), t(970) = 7.72, p < .000. The same phenomenon is observed with measures of wrongfulness where a mean increase of 4.97% was statistically significant, (t(970) = 7.15, p < .000), as well as for harmfulness with a mean increase of 12.61%, (t(970) = 12.91, p < .000). In general, participants seemed to rate fraud significantly more serious, wrong, and harmful when confronted with the scenario description as opposed to the one-line description.

The same trend can be observed in the ratings for assault. Seriousness ratings for the oneline description (M = 8.61, SD = 1.61) are significantly different from those given for the scenario (M = 9.12, SD = 1.29), (t(970) = 10.74, p < .000). A mean increase of 5.70% on ratings of wrongfulness for the assault scenario was also statistically significant, (t(970) = 10.42, p < .000). Furthermore, although the increase between ratings of harmfulness for the one-line description (M = 8.81, SD = 1.53) and the scenario (M = 9.26, SD = 1.35) was slightly smaller than that of wrongfulness and seriousness, a mean increase of 5.11% was nevertheless also significant, (t(970) = 9.08, p < .000.)

In general, hate crimes ratings saw the least amount of difference between one-line crime descriptions and the crime scenarios. The difference in ratings for seriousness was not statistically significant (t(970) = 0.88, p = .38). Similarly, ratings of wrongfulness also did not show any significant difference, (t(970) = 0.87, p = .38.) However, interestingly enough, a mean decrease in harmfulness by 4.17% for the scenario did prove to be statistically significant, (t(970) = 5.04, p < .000).

The difference in responses to break and enter, although significant, are different from those of the other crime types in that participants gave lower ratings in response to the scenario as opposed to the one-line description. The mean seriousness rating in response to the scenario (M=6.88, SD=1.89) was significantly lower than the response to the one-line description (M=7.17, SD=2.14), (t(970)=5.08, p<.000). In addition, the 3.01% decrease in wrongfulness ratings for the crime scenario was also statistically significant, (t(970)=4.89, p<.000). Finally, responses to ratings of harmfulness indicated again the most significant difference (t(970)=10.48, p<.000) with a 11.27% decrease in mean ratings of harmfulness after reading the crime scenario.

Discussion

Reviewing the results, participants seemed to rate crimes as more serious, wrong, and harmful when confronted with the scenario description as opposed to the one-line description.

The exceptions to this are the measures of harmfulness for the hate crime scenario and all severity measures for the break and enter crime scenario where participants were less severe in their ratings for the scenario than for the one-line description. Interestingly enough, the break and enter scenario is also the only scenario in which the perpetrator was female.

Prior research has indicated an effect for scenario variables regarding victim and offender characteristics (Vogel & Meeker, 2001; Bensimon & Bodner, 2012; Herzog, 2003; Doob & Roberts, 1984). Drawing on these results, it is possible that the results for the break and enter scenario may have been influenced by the fact that the perpetrator was female. Alternatively, it is possible that the punitive nature of the sentence in the scenario, especially considering the absence of information on the value of the stolen goods or prior conviction, may have resulted in students being more lenient in severity ratings. Furthermore, the decrease in ratings of harmfulness for hate crime can be attributed to the fact that the scenario described a non-violent hate crime while the generic description mentioned hate crime in general. Students may have interpreted the generic description of hate crime as involving violence resulting in higher ratings of perceived harmfulness.

With the exception of assault, the biggest difference in ratings was observed for perceived levels of harmfulness. This could possibly be attributed to the fact that harm is more tangible and real within the scenario as opposed to the one-line description where participants relied more on their own ideas about potential harm. In relating to the results from the regression analyses on wrongfulness and harmfulness as predictors of seriousness, it must be noted that harmfulness was the stronger predictor for all crime, with the exception of fraud. Thus, the rise of ratings for harm could explain the increased seriousness levels for the scenarios as compared to the more generic descriptions.

In addition, it must be noted that in general, the variability between ratings decreased when participants rated scenarios as opposed to the one-line descriptions. The decrease in variability can be understood in two ways. First, it may indicate that 'fill in the blank' behaviour and a priori assumptions mentioned by Lynch and Danner (1993) as well as within group differences on the exact nature of each crime type does indeed pose a problem to the reliability and internal validity of the research. Secondly, considering the influence of harm on perceptions of seriousness, the actual description of harm through the scenario description reduces the ambiguity surrounding the actual hurtful nature of the crime resulting in more consistent perceptions of harm. Einat and Herzog (2011) note that the variability of severity scores decreased as the seriousness of crime increased, particularly for violent crimes. Taking this observation and considering the fact that violent crimes often give a more succinct idea of the potential harm, I suggest that the perception of harm is key to explaining the variability in scores for generic one-line description compared to crime scenarios.

These considerations in addition to the significant differences observed between severity scores for generic one-line descriptions and crime scenarios confirm the hypothesis that crime representation makes a significant impact on severity ratings. In addition, it emphasizes the need to carefully consider the representation in academic research. Furthermore, it demonstrates the potential problematic nature of comparing research on perceptions without considering the representation of crime in those studies. Finally, an acknowledgement of these issues allows for a deeper understanding of the study results itself.

Chapter 8: Final Discussion and Conclusion

In the previous chapters, I have described the theoretical approach and the literature surrounding the topic. In addition, I have elaborated on the purpose of my study, outlining the research questions I sought to answer and stating my hypotheses. Furthermore, I have described my methodological approach to the project, elaborating on sample selection, survey design and choice of data analyses. Chapters four to seven described and discussed the results for each hypothesis. The decision to present most of the discussion in combination with the results was made to maintain clarity and meaningful coherence. Indeed, each hypothesis represents an important research contribution and in order to preserve those contributions, I decided to structure this study in a way that enabled the discussion of parts as well as the whole. The previous chapters discussed the importance of the parts. What I wish to do in this chapter is present the importance of the whole.

Starting with my research objectives, I will briefly discuss the results of the research in the context of each hypothesis and then go on to discuss the comprehensive findings and their wider implications. Mindful of the theoretical framework in which this study is situated, I will further reflect on the study itself, noting any research limitations. Finally, I will conclude with a brief reiteration of the study and suggestions for future research.

Discussion

The purpose of this study was to examine the influence of post-secondary education on perceptions of seriousness and attitudes towards punishment with some thought to conceptualizing seriousness and the representation of crime in research. As such, this study set out to answer the following four research questions. Firstly, to what degree do perceptions of moral wrongfulness and harmfulness influence perceptions of seriousness? Secondly, do

students' perceptions of crime severity and punitive attitudes vary for different offences?

Thirdly, does the level of post-secondary education and the student's field of study impact perceptions and attitudes towards crime and punishment? Fourthly, does the representation of crime in survey research on perceptions of crime impact participant responses to survey questions regarding offence severity and punishment?

In response to these questions, I put forth the following hypotheses. In the first place, both moral wrongfulness as well as perceived harmfulness would predict perceived seriousness ratings to different degrees depending on the crime. Secondly, participants would rate violent crime as more serious than non-violent hate crimes, property crimes and white-collar crime. In the third place, students with higher levels of education will rate certain crimes differently and hold less punitive views than those with lower levels. This difference would be enhanced by the participants' field of study. Finally, severity ratings would differ between generic one-line descriptions and crime scenarios. The results confirmed the first two hypotheses, the fourth hypothesis and, to some extent, the third hypothesis. Although these results have been discussed in greater detail in the previous chapters, I will briefly summarize the key points.

Consistent with the results observed in the literature (Warr, 1989; Adriaenssen et al., 2018; Stylianou, 2003; Rosenmerkel, 2001) perceived wrongfulness and harmfulness proved to be significant predictors of perceptions of crime seriousness. Although the degree of influence varied by crime type, perceptions of harmfulness tended to be more predictive of severity ratings than perceived moral wrongfulness, especially in the context of the crime scenarios. Similar to the results of other studies (Warr, 1989; Adriaenssen et al., 2018; Stylianou, 2003; Rosenmerkel, 2001), participants rated violent crime as significantly and consistently more serious, wrong, and harmful than other crimes. Furthermore, in rank order hate crime and fraud followed assault on

severity levels while break and enter received the lowest ratings. Reflecting on ratings of punitiveness, the data revealed that in general, students recommended harsher sentences than what was meted out by the court in the crime scenarios.

Regarding the influence of post-secondary education, the data showed that the level of post-secondary education had no impact on perceptions of crime. However, there were significant differences in how students from different fields of study responded to crime severity, wrongfulness, and harmfulness. Particularly, criminal justice students reported lower severity ratings than students from other fields. These trends are consistent with the literature (Kuehn et al., 2018) and continued through to measures of punitiveness. Specifically, criminal justice students recommended significantly lower sanctions than students from other fields. These results correspond with the findings in the literature regarding the influence of post-secondary education on punitive attitudes (Baird et al. 2016; Ridener & Kuehn, 2017; Falco & Martin, 2017; Kuehn et al., 2018). In controlling for demographic factors, it was noted that in general gender, age, and ethnicity showed significant effects on severity ratings, but not on responses for sentence severity. Consistent with the research, prior victimization showed little to no influence on measures of seriousness or sentence severity (Adriaenssen et al., 2018; Falco & Martin, 2012). Furthermore, despite the statistically significant differences, the overall impact of these factors on the variability of severity ratings was small.

Confirming the fourth hypothesis, results indicated that there is indeed a significant difference between severity ratings given in response to generic one-line descriptions of crime versus the more detailed crime scenarios. Except for break and enter, severity ratings, particularly perceptions of harmfulness, were higher for the crime scenarios than for the one-line

crime descriptions. Furthermore, variance levels for the ratings in response to the crime scenarios decreased, compared to those for the one-line crime descriptions.

Reviewing these results as a whole, several overarching observations can be made relating back to the epistemological paradigm of social constructionism and the theory of social interactionism. The highly significant impact of perceived wrongfulness and harmfulness on levels of seriousness combined with the small influence of post-secondary education appears to suggest certain universal perceptions of wrongfulness and harmfulness in response to specific crime categories that are engrained in society and quite resistant to change. Furthermore, despite variation between different areas of study and types of crime representation, ranking of crimes remained virtually similar despite the difference in credit hours completed, thereby also suggesting universal perceptions of seriousness ranking. Indeed, research over time has shown persistence in the ranking order (Warr, 1989; Adriaenssen et al., 2018). This does not suggest that these differences due to education and crime representation are of no importance. Rather, these observations force one to turn to a closer examination of the theoretical framework that informs us of the meaning and deeper significance of these results to answer the 'why' of these research observations.

As Berger and Luckmann (1966) point out, consistent with the social constructionist viewpoint, social compositions of reality are deeply imbedded in society, passed on through institutions legitimized by society, and quite resistant to change. Following this theory, perceptions of seriousness for specific crime types shape and inform social values and norms, resulting in dominant social constructions of reality. The tendency for survey participants to rate and rank crimes in a certain order represents a social reality in which certain crimes are perceived to be more serious than others and slow to change. These observations are supported

by prior studies indicating a relative cross-cultural consensus with respect of crimes ranking high in seriousness, which are typically those involving significant amounts of harm, although 'victimless' crimes or culturally specific crimes did not achieve this high level of consensus (O'Connell & Whelan, 1996; Stylianou, 2003).

The resistance to change can also be observed by noting how studies, including this research, that rank crime by seriousness consistently produce similar findings that emphasize the severity of violent crime, followed in this instance, by acts that have the potential to become violent, such as hate crime (Warr, 1989; Stylianou, 2003; Adriaenssen et al., 2018). This resistance to change is also reflected in the decrease of variability in severity scores for crimes that are more violent, as was observed in this study as well as others (Einat & Herzog, 2011).

Differences between crime types and levels of severity and punitive attitudes can be associated with a lack of the social representation of specific crime types and social knowledge surrounding these crime types. For example, as pointed out by McGurrin et al. (2013) there is a significant dearth in academic literature and coursework related to white-collar crimes. Lack of social and academic representations of white-collar crime in this instance lends itself to more ambiguous results with higher variance levels in severity ratings for fraudulent crimes. This can also be applied to the idea of crime representation within academic research examining perceptions and attitudes towards crime. When the context of the crime is more ambiguous, a lack of information leads to greater variability in the ratings, subsequently affecting the validity and reliability of the study. Supporting this influence of representations and knowledge of crime on perceptions of crime it can be noted that ratings for offence scenarios tended to be more consistent and more severe, particularly in relation to harmfulness, as participants became more informed about the actual circumstances surrounding the crime that occurred.

Differences between individuals and groups can also be due in part to their personal interpretations of social reality and the context in which their perceptions and attitudes are formed and informed. As Kuehn et al. (2018) points out, students appear to enter their field with pre-set beliefs that are resistant to change. The results for this study indicated significant differences between criminal justice majors and other fields of study, including those in social sciences. Based on these findings it appears that students entering certain fields are influenced by certain social representations of crime that, in turn, influence their perceptions of crime. Alternatively, it can be argued that students going into the field of criminal justice are more likely to have significant interests in matters relating to crime and the justice system.

Consequently, they may be more knowledgeable on matters surrounding crime and will potentially also be more open to accepting and adapting to other ways of knowing.

Therefore, despite the idea that universal perceptions and attitudes are resistant to change, knowledge does impact perceptions and behaviours towards crime. Knowledge can bring about changes in perceptions and attitudes, although these changes tend to occur slowly. As Berger and Luckmann (1966) note, "the relationship between knowledge and its social base is a dialectic one, that is, knowledge is a social product and knowledge is a factor in social change" (p. 104). Indeed, the differences in ratings between the one-line crime descriptions and the crime scenarios indicates the influence of knowledge in changing perceptions. As individuals learn more about the context surrounding the incident, perceptions and attitudes change, although they may still represent dominant social constructions of reality.

Also reflective of this change due to knowledge, is the impact of level of education on the sentencing recommendations made by criminal justice students in response to the break and enter scenario. This result suggests that students' attitudes towards sentencing changed as they

achieved higher levels of post-secondary education. Although such change was not seen in their perceptions towards the same scenario, nevertheless, it suggests change is possible. Drawing on this, it may be proposed that while perceptions are more resistant to change, actions can be influenced by knowledge. Nevertheless, it is still important to consider factors that influence and change perceptions. Consistent with the epistemological framework of social constructionism and symbolic interactionism, change in behaviour due to knowledge, may eventually result in changes in ways of thinking and knowing as new social values and norms are formed.

Wider Implications

Examining perceptions and attitudes towards crime and factors that influence these perceptions and attitudes can contribute more broadly to society. Prior research on public perceptions of crime seriousness has pointed to the importance on understanding how the public perceived crime and the possible implications these perceptions may have on the creation of policy (Roberts et al., 2007; Doob & Roberts., 1984; Adriaenssen et al., 2018). As Adriaenssen and colleagues (2018) point out, the seriousness of crime "features prominently in at least four areas of contemporary criminal policies: sentencing, criminalization, crime control and prevention" (p. 2). Indeed, sentencing and criminal justice policy guidelines in multiple countries including Canada are based on the presumed seriousness of crime, a seriousness that, in some cases, is based in part on public perceptions (Adriaenssen et al., 2018).

In the Canadian context, the Police-Reported Crime Severity Index (PRCSI), a weighted volume measure of crime severity, draws on the most recent five years of courts sentencing incarceration data as an objective way of measuring relative severity (Babyak, Alavi, Collins, Halladay, & Tapper, 2009). These results are then used to inform policy decisions on criminal justice issues. Furthermore, police perceptions of crime seriousness have also been shown to

impact police discretion towards young offenders (Department of Justice, 2015). Both the sentencing decisions of the courts as well as the practice of police discretion are based in part on social perceptions of crime.

Students majoring in criminal justice often go on to become criminal justice professionals, carrying their perceptions and attitudes with them into the workforce. As illustrated by the police discretion decisions described above, attitudes and perceptions can shape future approaches to punishment, crime control, rehabilitation, and government policy. Knowledge on student perceptions and attitudes towards various crime types and punishments and the subsequent influence of post-secondary education can inform academic institutions on the need to develop additional courses to generate more knowledge on certain offences.

For example, as was mentioned, research on the representation of white-collar crimes in criminal justice disciplines has noted a significant lack of information around white-collar crimes, both in criminal justice and criminological literature as well as in criminal justice curriculums (McGurrin et al., 2013). Consistent with prior research, criminal justice students also rated fraud as significantly less serious than business students in the generic descriptions while the fraud scenario showed no effects at all for field of study in this research. These results hint at the more ambiguous representation of white-collar crimes in society compared to the representation of other crimes and also suggest a potential lack of academic knowledge regarding the nature of white-collar crimes. Indeed, the high severity ratings given by business students can be attributed to the possibility that business students have a stronger grasp of the damaging nature of fraudulent crimes in a business context. Considering these results, criminal justice programs may consider incorporating more courses addressing corporate and white-collar crimes, preferably at lower course levels, to remedy this underrepresentation.

In addition to informing academic programs, knowledge on student perceptions and attitudes towards crime and punishment and the subsequent influence of post-secondary education on attitudes towards crime and punishment may inform professional training practices. As pointed out by prior research findings, (Roberts et al., 2007; Doob & Roberts., 1984; Adriaenssen et al., 2018) perceptions and attitudes towards crime and punishment provide the reasoning behind crime control practices and government policies. Furthermore, as I illustrated in this study, the way in which public perceptions of severity are measured and the representations of crime used to measure them can significantly influence the results and any subsequent policy informed by those results. Knowledge of perceptions and attitudes towards crime and punishment and an understanding of how they are formed and informed will shed new light on the social approaches to dealing with crime and may influence crime control practices and government policies.

Academic Contributions

Regardless of the topic or design, scholarly research most often seeks to contribute to academic knowledge on a particular object or phenomenon. In addition to the relevance of the results in a wider social context, this study sought to contribute to the literature on perceptions of seriousness and attitudes towards punishment by conceptualizing seriousness, examining the influence of crime type and education, and reviewing the influence of academic crime representation. As was pointed out previously, existing research has compared perceptions of seriousness and attitudes towards punishment over different types of crime (Adriaenssen et al., 2018; Michel, 2016; Rosenmerkel, 2001; Stylianou, 2003). It has also looked at differences in punitiveness and how education affects punitiveness (Roberts et al., 2007; Falco & Martin, 2012; Ridener & Kuehn, 2017). However, prior studies have not addressed the interaction of different

crime types and the individual's education level and field of study on levels of seriousness. It is this gap that my research sought to fill.

While previous research has compared perceptions and attitudes over various types of crime (Adriaenssen et al., 2018; Rosenmerkel, 2001; Stylianou, 2003), to the best of my knowledge the specific inclusion of hate crime is unique to this study. Furthermore, while prior studies compared perceptions of crime between two to three majors (Falco & Martin, 2012; Ridener & Kuehn, 2017), this research employed 6 major fields of study. Not only did this approach present a larger target population and, subsequently, a larger sample, but it also provided more insight into the perceptions of university students as a whole. In addition, it revealed significant differences in perceptions of seriousness between criminal justice students and students from other social science majors, particularly regarding perceptions of hate crime and sentencing severity for break and enter. Considering that criminal justice is generally considered to be a social science, these results offer a different perspective of the perceived similarities between these fields that emphasizes the possible influence education and the specific knowledge of the criminal justice system has on perceptions and attitudes.

Besides the contribution to academic knowledge on perceptions of crime and punishment, this study also provided additional insight into matters of crime representation in criminological research design. The effects of non-criminogenic characteristics in scenarios on perceived levels of seriousness has been noted by various studies (Vogel & Meeker, 2001; Bensimon & Bodner, 2012; Herzog, 2003; Doob & Roberts, 1984). Furthermore, more generic approaches to crime descriptions have been critiqued for problems surrounding a priori assumptions and 'fill in the blank' behaviour (Lynch & Danner, 1993). However, to the best of my knowledge no-one has

compared the potential differences in perceptions these two methods of crime representation may elicit.

In comparing the levels of severity for one-line descriptions to more detailed and authentic case scenarios of the same crime, this study illustrates how the representation of crime in research can influence perceptions of crime. Indeed, the significant differences in mean levels of severity emphasizes the need to carefully consider how one goes about representing crime in similar research endeavors. Furthermore, it opens a debate about comparisons made between studies using different approaches to crime representation, questioning the validity of such comparisons when reviewing mean levels of severity.

Reflections and Limitations

In keeping with the theoretical framework adopted for this study, reflexivity regarding the research is appropriate as is the acknowledgement of limitations. As Lamb and Huttlinger (1989) argue, reflexivity should be employed in understanding how the personal and social context of the researcher has impacted the creation of research instruments and the construction and selection of questions. In regard to the decision to select a survey design, the choice of a quantitative design that incorporates minimal interaction between the researcher and the participant was not only driven by concerns regarding anonymity and free consent. Rather, the initial decision to adopt this manner of data collection was influenced by my difficulty with personal interactions in a research context. I felt that, in relation to my insecurity, direct interaction with the participant would negatively impact data collection and the subsequent research results.

To some degree, reflexivity has already been employed in discussing the decisions to use certain statistical tests in chapter three. In particular, I have already confronted and discussed the implications of using an online survey design, using a convenience sample, measuring perceptions using a Likert scale, and using parametric tests to analyses the data. Indeed, in reviewing this study, one should keep in mind the limitations of the approach. In relation to the survey design, the selection of crime scenarios requires a degree of reflexivity on underlying factors influencing these decisions. While the use of actual court cases mitigates the involvement of the researcher, yet the decision on which cases to use and what characteristics to include and what to exclude were very much influenced by myself as researcher.

In addition, the collapsing of majors into different fields of study may have had some unintended consequences on the results. Keeping in mind the differences between criminal justice students and students from other social science majors, the possibility exists that there may have been differences between other majors that remained hidden. Furthermore, while the decision to include hate crime was a novelty, the choice of only four crime descriptions and scenarios limits the generalizability of the findings to similar offences and excludes a discussion around perceptions for other crime types. For example, the crime description of fraud used in this study is but one of many examples of white-collar crime. Future studies might want to consider the idea of incorporating different types of white-collar crime. Considering the potential bias of the break and enter scenario in this study, future research may also want to reflect on using scenarios that represent the 'norm' in terms of sentencing and descriptions, although this may be difficult to achieve. In addition, one might want to consider including crimes that have received more attention recently. For example, violent hate crime, environmental crimes and internet crime. Furthermore, one might want to consider examining the differences between majors rather than general fields of study to reveal differences that may otherwise be missed.

Finally, in considering the results from the study, one must keep in mind that consistent with a constructionist worldview, the analysis of any data should be viewed as a way of understanding dominant social constructions of reality from "which they emerged and which, in turn, they influence" (Berger & Luckmann, 1966, p. 210). Like a mirage, this study provides a snapshot in time of one of many realities that exist about crime within a social context. As such, these results should be observed and understood as one of many truths.

Conclusion

Public perceptions of crime seriousness and attitudes towards the punishment of crime stem from the social norms and values that shape society. Perceptions of crime are formed and informed in multiple ways and through multiple factors to reflect the social reality of crime. Representing social norms and values, our perceptions of crime severity ultimately also determine our behaviour and reaction towards crime. Located within a social constructionist paradigm, the purpose of this study was to examine the influence of post-secondary education, crime type and crime representation on perceptions of crime severity and punitive attitudes for different crime types. It focused on examining the influence of wrongfulness and harmfulness on perceptions of seriousness, the effect of offence type, the impact of post-secondary education, and the influence of crime representation on severity ratings and sentencing suggestions.

Findings reveal that both wrongfulness and harmfulness are strong predictors of perceived seriousness. In addition, as predicted violent crimes ranked highest on measures of seriousness, wrongfulness, and harmfulness. Results for the suggested sentence severity showed similar trends with the most severe sentence recommendations made for assault. Furthermore, sentence recommendations were on average harsher than what was meted out by the court.

In relation to the influence of post-secondary education, the data indicated that while the level of education completed had no significant difference on perceptions of crime severity, differences between fields of study showed significance. In general, criminal justice students reported the lowest ratings of severity and gave the lowest recommended sanctions. In addition, a significant interaction was observed for criminal justice students between the number of credit hours completed and suggested sentence severity.

A comparison between responses to the one-line crime descriptions and the crime scenarios revealed significantly stronger severity ratings for the scenarios than for the one-line descriptions although the ranking of crimes remained similar. There was a significant increase in perceived levels of harmfulness. These results emphasize the need for careful consideration regarding the manner of crime representation in social science research.

Based on the results, it appears that there are certain universal notions of wrongfulness and harmfulness that influence perceptions of seriousness and are quite resistance to change. Perceptions towards crime are informed by dominant social constructions of reality that shape our knowledge of crime. Although changes in perceptions and attitudes are possible, they occur slowly as new knowledge informs our reactions to crime and eventually changes perceptions. This study contributes to understanding the underlying factors that influence perceptions and attitudes towards crime in a manner that may shed new light on the social approaches to dealing with crime and provides new insights into crime control practices and government crime policy.

Finally, considered through a social constructionist lens, all behaviours and actions, including academic research endeavors, are guided by social constructions of reality. As such, the results from this study should be "reconceptualized as an imperfect human construction and carefully situated in time and place" (Hayward & Young, 2004, p. 268). Like all other sources of

knowledge, the knowledge presented in this study is grounded in the social construction of the realities of crime and, in turn, informs these realities. Like a mirage, it adds to the multiple ways of knowing about crime and our perceptions towards crime and offers a perspective and a representation of the truth that is out there.

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Appendix A

Survey Questionnaire

This survey looks at perceptions of crime seriousness and punitive attitudes towards crime in post-secondary students at the University of Winnipeg. Your responses to the questions are anonymous. Your participation is voluntary, and you may choose to exit out of the survey at any time. Upon completion of the survey you will be offered the opportunity to enter in a prize draw for one of three \$100 gift certificates for Amazon.

Section 1: Post-secondary Education. This section assesses the level of post-secondary education and collects information on the field(s) student participants are majoring in. Please select the most appropriate response(s).

| 1. I am currently enrolled in at least one undergraduate or graduate course at the University |
|--|
| of Winnipeg. |
| ☐ Yes |
| ☐ No (respondents selecting no will be thanked for their contribution and screened |
| out of the survey) |
| |
| 2. I currently am enrolled as a at the University of Winnipeg |
| ☐ Part-time undergraduate student |
| ☐ Full-time undergraduate student |
| ☐ Part-time graduate student |
| ☐ Full-time graduate student |
| ☐ Choose not to answer |
| Grad students will be directed to q. 3 and then to section 2. All other options will skip q. 3 but |
| will answer $q.4-7$. |
| |

| 3. In which graduate program are you currently enrolled as graduate student? | | | | | | | |
|--|--------|---|--|--|--|--|--|
| | | MA in Criminal Justice | | | | | |
| | | MA in Cultural Studies | | | | | |
| | | MA in Applied Economics | | | | | |
| | | MA in Indigenous Governance | | | | | |
| | | MS in Applied Computer Science and Society | | | | | |
| | | MS in Bioscience, Technology and Public Policy | | | | | |
| | | ☐ Master in Development Practice: Indigenous Development | | | | | |
| | | Master in Management: Technology, Innovation and Operations | | | | | |
| | | Master of Marriage and Family Therapy | | | | | |
| | | MA Theology | | | | | |
| | | Joint Masters Program in History | | | | | |
| ☐ Joint Masters Program in Public Administration | | | | | | | |
| | | Joint Masters Program in Religious Studies | | | | | |
| ☐ Joint Masters Program in Peace and Conflict Studies | | | | | | | |
| | | Other (Please specify) | | | | | |
| | | Choose not to answer | | | | | |
| | | | | | | | |
| 4. | What i | s/are your declared or intended undergraduate major(s). (Select all that apply) | | | | | |
| | | Aboriginal Governance | | | | | |
| | | Anthropology | | | | | |
| | | Applied Computer Science | | | | | |
| | | Bio-anthropology Biochemistry | | | | | |
| | | Biology | | | | | |
| | | Biopsychology | | | | | |
| | | Business & Administration | | | | | |
| | | Chemistry | | | | | |
| | | Classics (Greek and Roman Studies) | | | | | |
| | | Conflict Resolution Studies Criminal Justice | | | | | |
| | | Developmental Studies | | | | | |
| | | Disabilities Studies | | | | | |
| | | Economics | | | | | |
| | | Education | | | | | |
| | | Engineering | | | | | |

| | | English |
|----|--------|---|
| | | Environmental Studies |
| | | French Studies |
| | | Geography German-Canadian Studies |
| | | German Studies German Studies |
| | | History |
| | | History of Art |
| | | International Development Studies |
| | | Italian Studies |
| | | Kinesiology and Applied Health |
| | | Mathematics & Statistics |
| | | Mennonite Studies Madam Language and Literatures |
| | | Modern Languages and Literatures Philosophy |
| | | Physics |
| | | Politics |
| | | Psychology |
| | | Religion & Culture |
| | | Rhetoric and Communications |
| | | Sociology |
| | | Spanish Studies Theatre and Film |
| | | Urban & Inner City Studies |
| | | Women's & Gender Studies |
| | | Other (please specify): |
| | | I have not yet decided my major. |
| | | Choose not to answer |
| | | |
| | | |
| 5. | Combi | ned, I have attended year(s) of post-secondary education. (Include years at the |
| | Univer | sity of Winnipeg and any other University attended). |
| | | |
| | | Less than 1 |
| | | 1 |
| | | 2 |
| | _ | 3 |
| | П | 4 |
| | | 5 or more |
| | | Choose not to answer |
| | | Choose not to answer |

| 6. | I have completed credit hours (Please provide an estimate if not sure. A semester |
|----|---|
| | course is 3 credits, a two-semester course is 6 credits) |
| | _ |
| | ☐ Choose not to answer |
| | |
| 7. | My total credit hours put me in the following range: |
| | \square 0-30 |
| | □ 31 − 60 |
| | □ 61-90 |
| | □ 90 and up |
| | ☐ Choose not to answer |

Section 2: Perceptions of Crime and Punishment.

The following section looks at the perceptions of crime seriousness and attitudes towards punishment. It consists of two parts. In the first part of this section participants will be given a list of Criminal Code offences and will be asked answer questions in relation to each crime. In the second part, participants are asked to read several crime scenarios and answer the questions in relation to each scenario.

Part I – Crime list

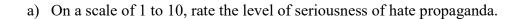
For this part, consider the seriousness of the criminal act. How serious is this type of criminal behavior? When asked about the wrongfulness of the criminal act, consider the moral aspects of the crime. How morally wrong was the behavior? When asked about the harmfulness of the crime, consider the level of harm resulting from the crime. Please consider the following list of crimes and answer the questions to the best of your ability. There are no right or wrong responses.

- 1. Fraudulent transactions relating to contracts and trade (exceeding \$1,000,000)
 - a) On a scale of 1 to 10, rate the level of seriousness of fraud.

b) On a scale of 1 to 10, rate the wrongfulness of fraud.

c) On a scale of 1 to 10, rate the level of harm generated by fraud.

2. Hate propaganda



b) On a scale of 1 to 10, rate the wrongfulness of hate propaganda.

c) On a scale of 1 to 10, rate the level of harm generated by hate propaganda.

3. Aggravated Assault

a) On a scale of 1 to 10, rate the level of seriousness of aggravated assault.

b) On a scale of 1 to 10, rate the wrongfulness of aggravated assault.

c) On a scale of 1 to 10, rate the level of harm generated by aggravated assault.

| 1 | Brea | 1 | 1 T | ' |
|---|------|------|-----|-----------|
| 4 | Brea | หาดา | ากษ | nter |

a) On a scale of 1 to 10, rate the level of seriousness of break and enter.

Not serious 1----2----3-----4----5-----6----7-----8-----9-----10 Very Serious

b) On a scale of 1 to 10, rate the wrongfulness of break and enter.

Not wrong 1----2----3----4----5----6----7----8----9----10 Very wrong

c) On a scale of 1 to 10, rate the level of harm generated by break and enter.

Not harmful 1----2----3-----6----7----8----9----10 Very harmful

Part II - Crime Scenario

For this part, consider the seriousness of the criminal act. How serious is this type of criminal behavior? When asked about the wrongfulness of the criminal act, consider the moral aspects of the crime. How morally wrong was the behavior? When asked about the harmfulness of the crime, consider the level of harm resulting from the crime. Please read the scenarios carefully and answer the questions to the best of your ability. There are no right or wrong responses.

Scenario 1 – Fraud over \$5000 (R v Paterson, 2013 BCPC 5)

Mr. P, President, Chief Executive Officer, and a Director of S. R. Corp, has been charged for committing fraud in excess of \$5000 by falsifying gold assay data results in relation to a mining resource project. Mr. P defrauded members of the public who sought to buy shares in S.R. Corp, and defrauded S. R. Corp of services and capital. Total estimated loss for S. R. Corp. has been calculated to be many millions of dollars.

In addition, a large number of corporate investors have also reported significant financial loss that in some instances affected the quality of life and created financial and emotional hardships. For example; Mr. W., retired at age 68 and took out a loan of \$750,000 to invest in S.R. Corp. Mr. W's total investment in S.R. Corp. was valued at \$2.5 million. Mr. P's fraudulent actions had a devasting impact on Mr. W, leading to loss of savings, loss of enjoyment of life, and retirement living on a much reduced budget.

Mr. P was sentenced on four counts of fraud for an imprisonment of 6 years, sentences to be served concurrently. In total, Mr. P will have to spend 6 years in prison.

1. On a scale of 1 to 10, rate the level of seriousness of the crime described in the above scenario.

3. On a scale of 1 to 10, rate the level of harm generated by the crime described in the above scenario.

- 4. In relation to the sentence, do you think Mr. P's sentence should have been:
 - a. Much lighter
 - b. Somewhat lighter
 - c. About the same
 - d. Somewhat harsher
 - e. Much harsher

Scenario 2 – Hate Propaganda (R v Brazau, [2014] O.J. No. 2080)

Mr. B has been convicted of willfully promoting hatred of Muslims by distributing anti-Muslim pamphlets at Ryerson University. His actions caused members of the University community to feel unsafe. Mr. B was also charged with criminal harassment, mischief and breach of probation. Mr. B was sentenced to 4 months of jail for willfully promoting hatred in addition to two months of jail time for harassment and mischief and three months for breach of probation. In total, Mr. B was sentenced to 9 months of imprisonment.

1. On a scale of 1 to 10, rate the level of seriousness of the crime described in the above scenario.

| 3. | On a scale of 1 to 10, rate the level of harm generated by the crime described in the above |
|----|---|
| | scenario |

- 4. In relation to the sentence, do you think Mr. B's sentence should have been:
 - a. Much lighter
 - b. Somewhat lighter
 - c. About the same
 - d. Somewhat harsher
 - e. Much harsher

Scenario 3 – Robbery & Aggravated Assault (R v Lundgren, 2016 ABPC 138)

Mr. L has been charged with aggravated assault and robbery. Mr. L, together with a female associate, entered the room of Mr. B at the Royal Western Hotel. He assaulted and robbed Mr. B of his bank card. Mr. L. was then observed at Mac's Convenience store where he robbed \$2978.20 in cash and \$862.00 in scratch lottery tickets.

Mr. B was found unconscious in the hotel room and remains in a coma with severe and permanent brain injuries. Mr. L was sentenced to a 10-year jail sentence.

1. On a scale of 1 to 10, rate the level of seriousness of the crime described in the above scenario.

3. On a scale of 1 to 10, rate the level of harm generated by the crime described in the above scenario.

- 4. In relation to the sentence, do you think Mr. L's sentence should have been:
 - a. Much lighter
 - b. Somewhat lighter
 - c. About the same
 - d. Somewhat harsher
 - e. Much harsher

Scenario 4 – Break and Enter and Theft (R v Isaac, 2006 BCSC 1529)

Ms. I has been charged with two convictions of break and enter and commit theft and for possession of stolen property. On May 25, 2006, Ms. R came home to find Ms. I walking out of the front door. Ms. R found that a number of items had been taken from the house, including her wallet and credit cards. Following the police investigation, Ms. I was arrested and found in possession of property that had been stolen the day before from another house. The stolen property included items of jewelry and heirlooms. Ms. I was sentenced to 6 months jail sentence for count 1 of break and enter and theft, 18 months jail sentence for count 2, possession of stolen goods, and another 18 months for count 3, the previous break and enter and theft. The sentences are to be served concurrently. In total, Ms. I will have to serve 18 months in jail.

1. On a scale of 1 to 10, rate the level of seriousness of the crime described in the above scenario.

| 3. | On a so | cale of 1 to 10, rate the level of harm generated by the crime described in the above o. |
|---------|---|---|
| | Not ha | rmful 1235678910 Very harmful |
| 4. | a.b.c.d. | tion to the sentence, do you think Mr. I's sentence should have been: Much lighter Somewhat lighter About the same Somewhat harsher Much harsher |
| Section | n 3: Pri | or Victimization. The following section considers prior victimization and how |
| that m | ay have | influenced your responses in the previous section. In this section, you will be |
| asked | whether | or not you have ever been a victim of a criminal offence. Please answer the |
| follow | ing ques | stions to the best of your ability. |
| | | |
| 1. | Have y | ou, or anyone close to you, ever been a victim of any crime(s)? |
| | | Yes (If yes, participants will be taken to question 3) |
| | | No (If no, participants will be directed to Section 4) |
| | | Choose not to answer |
| 2 | D: 141. | |
| 2. | | e crime, you or anyone close to you was a victim of, include any of the criminal |
| | | es mentioned in the crime descriptions or scenarios? Please select all that apply. |
| | | Yes, it included aspects of fraud |
| | | Yes, it included aspects of assault and/or robbery |
| | | Yes, it included aspects of hate crime |
| | | Yes, it included aspects of break and enter and/or theft |
| | | No |
| | | Choose not to answer |

Section 4: Demographic Information. The following section addresses demographic characteristics to enable quality data analysis by controlling for the influence of these characteristics. Please answer the following questions to the best of your ability.

| 1. | Please | specify your age | | | | |
|----|-----------------|--|--|--|--|--|
| | ☐ 17 or younger | | | | | |
| | | 18 - 24 | | | | |
| | | 25 - 34 | | | | |
| | | 35 – 44 | | | | |
| | | 45 - 54 | | | | |
| | | 55 or older | | | | |
| | | Choose not to answer | | | | |
| | | | | | | |
| 2. | What i | s your ethnicity? (Please select all that apply) | | | | |
| | | Indigenous (Includes First Nations, Metis, and Inuk) | | | | |
| | | White/Caucasian | | | | |
| | | South Asian (East Indian, Pakistani, Sri Lankan, etc.) | | | | |
| | | Chinese | | | | |
| | | Black | | | | |
| | | Filipino | | | | |
| | | Latin American | | | | |
| | | Arab | | | | |
| | | Southeast Asian (Vietnamese, Cambodian, Laotian, Thai, etc.) | | | | |
| | | West Asian (Iranian, Afghan, etc.) | | | | |
| | | Korean | | | | |
| | | Japanese | | | | |
| | | Other (Please specify) | | | | |
| | | Choose not to answer | | | | |

| 3. What is your gender? | | | | | | |
|---|--|--|--|--|--|--|
| ☐ Woman | | | | | | |
| ☐ Man | | | | | | |
| ☐ Trans woman | | | | | | |
| ☐ Trans man | | | | | | |
| ☐ Two-spirit | | | | | | |
| ☐ Gender neutral or gender free | | | | | | |
| ☐ Other (<i>Please specify</i>) | | | | | | |
| ☐ Choose not to answer | | | | | | |
| You have reac | thed the end of the survey. Do you wish to submit or discard your responses? | | | | | |
| ☐ Yes, I would like to submit my responses. | | | | | | |
| | No, I do not wish to participate anymore. Please discard my responses. | | | | | |
| | (Individuals will receive a message confirming that their data has been | | | | | |
| | discarded.) | | | | | |
| | | | | | | |

Please retain the following unique identification code for reference should you decide to withdraw your responses at any future point before the final results are disseminated.

(Participants will be provided with a unique identification code)

Thank-you for your participation!

You will now be directed to a separate survey where you will be given the opportunity to enter in the prize draw for one of three \$100 gift certificates from Amazon.

(Participants will be directed to a separate survey platform where they can enter their email contact information for the draw)

Prize Draw

| 1. | Do you wish to enter into the prize draw for one of three \$100 gift certificates from |
|----|--|
| | Amazon? |
| | |

Note: Contact information collected for the purpose of the draw is collected separately from the survey responses and cannot be traced back to the survey responses. Contact information will be permanently deleted once the prize winners have been selected.

| Yes, I would like to enter into the draw. (Participants will be directed to question 2) |
|---|
| No, I do not want to enter into the draw (Participants will be directed out of the |
| survey platform) |

2. Please provide your email address in the space below.

Thank-you for your participation!

Appendix B

Classification List of Majors

| | Business Economics | Humanities | Social Sciences | Science | Education | Criminal Justice |
|---------------|--------------------|------------------------------|--|--|-----------|---------------------------|
| Undergraduate | BusinessAdmin | Classics | AboriginalGovernance | AppliedComputerScience | Education | Criminal Justice |
| | Economics | EastAsianLang | Anthropology | Bioanthro | | |
| | EconomicsFinance | English | ConflictResolution | Biochem | | |
| | | French | CrimJustice | Biology | | |
| | | German | DevelopmentStudies | Biopsych | | |
| | | GermanCanadianStudies | DisabilitiesStudies | Chemistry | | |
| | | History | HumanRights | EnviromentalStudies | | |
| | | HistoryofArt | IndigenousStudies | Geography | | |
| | | InterdisciplinaryLinguistics | InternatDevelopStudies | MathematicsStatistics | | |
| | | Italian | Politics | Physics | | |
| | | MennoniteStudies | Psych | Kinesiology | | |
| | | ModernLanguages | Sociology | | | |
| | | Philosophy | UrbanInnerCityStudies | | | |
| | | Religion | WomenGenderStudies | | | |
| | | RhetoricCommunications | | | | |
| | | Spanish | | | | |
| | | Theatre | | | | |
| Graduate | | MA in Cultural Studies | MA of Marriage and Family Therapy MA in Developmental Practice: Indigenous Development | Master in Management: Technology, Innovation and Operations MS in BioScience, Technology and Public Policy | | MA in Criminal Justice |
| | | | | MS in Applied Computer Science and Society | | |