

Biased Perceptions of Alibis and Suspects: An Elaboration Likelihood Model Perspective
on Alibi Believability

by

Meredith Lesley Jane Allison

B.A., Queen's University, 1999

M.A., University of Victoria, 2002

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ABSTRACT

When do stereotypes and biases affect judgments of alibis and crime suspects? Two studies addressed this question. Undergraduates ($N = 192$ in Study 1, $N = 339$ in Study 2) listened to an audio-taped police interview with a suspect concerning his/her alibi. Participants then rated the believability of the alibi and the likelihood that the suspect was guilty. The impact of: (1) the strength of the evidence that supported the alibi; (2) characteristics of the suspect (e.g., gender, attractiveness, and prior convictions); (3) judge's instructions on prior conviction evidence; and (4) perceivers' motivation to process the alibi (using scores on the Need for Cognition Scale) on alibi believability and likelihood of suspect guilt ratings was studied. Other dependent measures were assessments of the suspect's character and participant-jurors' understanding of judicial instructions. It was found that the suspect's gender and level of physical attractiveness did not affect alibi believability and guilt ratings, but were important when it came to assessing the suspect's character. Participants took the defendant's prior record into consideration when assessing guilt: Defendants previously convicted of the same crime as the current charge were seen as more likely to be guilty than defendants previously

convicted of a different crime. Judge's instructions did not affect guilt ratings, which suggests that participants did not use the prior conviction evidence as they had been instructed. In contrast to predictions, need for cognition played less of a role in terms of alibi believability ratings and guilt judgments. However, NFC did affect participants' understanding of judicial instructions and their recall of those instructions. The two studies suggest that alibi strength consistently influences believability and guilt ratings. Strong alibis were seen as more believable and led to lower guilt ratings than weak alibis. Limitations of this dissertation, legal implications, and future directions are discussed.

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Dedication

To my parents

Chapter One: Introduction

“The law holds that it is better that ten guilty persons escape than that one innocent suffers”

(Blackstone, 1765-1769)

For centuries scholars have feared the occurrence of a great miscarriage of justice: the conviction of the wrongfully accused. There are several reasons why innocent persons can be wrongfully convicted. Eyewitness identification errors, false confessions, erroneous jailhouse informants (Reno, 2005), and weak or absent alibis are some of the causes of wrongful convictions (Olson & Wells, 2004). The current research focuses on alibi believability. An alibi is a suspect's claim that (s)he was in another place at the time of the crime (Burke & Turtle, 2003). A suspect's alibi can powerfully affect juror decisions. Research to date suggests that jurors generally regard alibis with skepticism (Olson & Wells, 2004). However, there have been few studies in law and psychology on alibi believability and many questions remain. For example: What biases do people hold that can affect their perceptions of alibis? Do biases always affect judgments of alibis and suspects or are there some circumstances in which biases have more or less impact?

This dissertation examines people's stereotypes of suspects and their alibis. The research is informed by four main categories of variables in the persuasion literature (Petty & Wegener, 1998). First, the suspect's (or *source's*) characteristics are important because in many circumstances salient characteristics, like gender, can affect our perceptions of others (Fiske, 1998). Second, the *recipient's* characteristics are important because people vary in their motivation and their ability to process information about others. Third, *contextual*, or legal, factors (e.g., judges' instructions regarding the use of evidence in a trial) can affect perceptions of suspects. Fourth, the strength of the evidence

in support of the alibi (the *message*) can affect perceptions of suspects.

From the perspective of the legal system, why are alibis important? As stated above, weak alibis are cited as one of the causes of wrongful convictions in the United States (Burke, Turtle, & Olson, in press). Specifically, Wells et al. (1998) found that in 11/40 DNA exoneration cases, suspects provided weak alibi evidence or no alibi evidence. When alibis are offered as evidence in trial, "68% (US) to 86% (Canada Court of Appeal) of cases involved alibis where another person's testimony was offered as support" for the suspect's claim about where (s)he was at the time in question (Burke & Turtle, 2003). Physical evidence supporting an alibi is less likely to be provided (2% (Canada Supreme Court) to 14% (US)) (Burke & Turtle, 2003). Thus weak alibis (e.g., those corroborated by friends and family with no physical evidence) appear to be quite common and can work against the suspect or defendant.

Current Research in the Context of Published Literature. How are alibis addressed in the legal literature? Legal scholars have discussed the fact that even though false alibis do not necessarily imply guilt, alibis are quite easy to fabricate and should be treated with caution (Burke & Turtle, 2003). Several jurisdictions require that the defense give notice of an alibi defense at a reasonable time before trial to give the prosecution time to investigate the alibi (Connelly, 1983). Another issue raised in the legal literature is judges' instructions to the jury regarding alibi evidence. In some US jurisdictions, juries are informed that the burden of proof is on the prosecution to prove the alibi false, not on the defendant to prove the alibi to be true (Connelly, 1983). However, other jurisdictions omit instructions to the jury regarding the alibi (Gooderson, 1977).

Psychological alibi research to date has examined several factors including: the strength of the evidence that supports the alibi (e.g., person corroborates the alibi or not,

physical evidence supports the alibi or not, Olson & Wells, 2004); characteristics of the person corroborating the alibi (e.g., neighbour or girlfriend, Culhane & Hosch, 2004); characteristics of the suspect (i.e., race, Sargent & Bradfield, 2004); characteristics of the person assessing the alibi (i.e., motivation to assess alibi or not, Sargent & Bradfield, 2004); and people's ability to generate their own alibis (e.g., Stromwall, Granhag, & Jonsson, 2003).

What is missing from the current alibi literature? Race aside, characteristics of the *source* of the alibi (i.e., the suspect) have not been studied. I aimed to broaden the study of source characteristics by examining how the suspect's gender, attractiveness, and prior convictions affect the alibi's believability. In addition, there has only been one study that examined characteristics of the *recipient* of the alibi (i.e., the person assessing the alibi; Sargent & Bradfield, 2004). Further, no alibi studies to date have examined the impact of *contextual* (i.e., judge's instructions) factors on alibi believability and I included this variable in my second study. Finally, with the exception of one study (Sargent & Bradfield, 2004), researchers have not taken into account the complexity of the alibi evaluation context. Specifically, researchers have isolated factors in the alibi context (e.g., message variables only); however, they have not examined the interaction of different categories of variables. For example, Olson and Wells (2004) studied message variables (i.e., the strength of the alibi evidence) but did not consider characteristics of the suspect or the recipient of the alibi. In this dissertation, source, message, recipient and context variables are included within the same study (the second study) so that the interactions between these variables could be studied.

Another issue relevant to this dissertation is the system-estimator variable distinction (Wells, 1978). Gary Wells (1978) noted that the variables under study in the

eyewitness testimony research domain could be divided into two categories. System variables are those that are or could be under the control of the judicial/legal system. Examples of system variables are the construction of the lineup an eyewitness views and instructions given to eyewitnesses before they view a lineup. In contrast, estimator variables are those variables that are not under the control of the judicial/legal system. Examples of estimator variables are eyewitness age and the lighting conditions at the time of the crime. While both system and estimator variables are worthy of study, legal and policy changes can be made because of system variable research. For example, eyewitness researchers recommend that prior to viewing the lineup, eyewitnesses should be reminded that the criminal may or may not be in the lineup (as a reminder that they do not have to choose a lineup member - the police suspect in custody may not be the actual criminal) (Wells et al., 2000). Recently, eyewitness researchers helped to create national guidelines for gathering eyewitness evidence for the US Department of Justice (Wells et al., 2000).

The system-estimator variable distinction can also be applied to other law and psychology areas. It can be applied to the alibi research in that all of the previous alibi studies (mentioned above) have studied estimator variables. For example, the evidence that supports an alibi, the characteristics of the defendant (e.g., race) etc. are not under the control of the judicial/legal system. In this dissertation I aim to broaden the study of estimator variables in the alibi context (i.e., source variables like attractiveness and gender, and prior convictions). In the second study, a system variable was included (judicial instructions) so that its impact on perceptions of suspects and alibis could be assessed. None of the alibi studies to date have included a system variable in their design.

Theoretical Framework for the Research. I examined the role of bias in alibi

believability and views of the suspect's guilt from an Elaboration Likelihood Model (ELM) perspective (Petty & Cacioppo, 1981). The ELM is a theoretical model of persuasion that describes how recipients change their attitudes because of the interaction of source, message, recipient, and context variables. Who is making the persuasive message (source variables)? Source variables like attractiveness and credibility have been found to affect persuasion. What kind of information is in the message (message variables)? Message variables like argument strength are also important in the persuasion context. Who is receiving the persuasive message (recipient variables)? Recipient variables like need for cognition (i.e., tendency to prefer deep thinking) can affect whether messages are received. What is happening in the persuasion setting (context variables)? Context variables are defined generally as factors in the persuasion setting (e.g., distractions, message repetition) that can affect attitude change (Petty & Wegener, 1998).

A key component of the ELM is the elaboration continuum. At one end of the continuum is the central route to persuasion; at the other end lies the peripheral route. For the most part, recipients on the central route consider the provided information and come to a thoughtful, reasoned decision (Petty & Cacioppo, 1981). Individuals on the central route are more motivated and able to scrutinize messages carefully and elaborate on the issues at hand. In contrast, individuals on the peripheral route are less motivated and less able to carefully process messages. These individuals are more likely to take a biased approach to the processing of messages (Petty & Cacioppo, 1981).

The following sections will review the research on the ELM, issues pertaining to characteristics of the alibi/message, characteristics of the suspect/source, context variables, and recipient variables.

Persuasion

Of the modes of persuasion furnished by the spoken word there are three kinds. The first kind depends on the personal character of the speaker; the second on putting the audience into a certain frame of mind; the third on the proof, provided by the words of the speech itself.

(Aristotle, Rhetoric)

Scholars have discussed attitudes, and attitude change (i.e., persuasion) for centuries. Aristotle discussed persuasion and the art of rhetoric to instruct the citizens of Ancient Greece; his students sought to be persuasive and influential orators. Persuasion issues remain relevant in modern times. In their chapter on attitude change in the Handbook of Social Psychology, Richard Petty and Duane Wegener (1998) noted that persuasion researchers in psychology have traditionally divided the field into source, message and recipient variables, just as Aristotle did. However, modern thinkers approach persuasion from an empirical standpoint. Researchers have investigated those circumstances that make persuasion attempts more or less successful. Some researchers seek to find ways in which messages can be more persuasive, while others look for ways that people can resist persuasive attempts. Researchers have also created theoretical models that are supported by empirical findings (e.g., the Elaboration Likelihood Model (ELM), Petty & Cacioppo, 1981). The ELM is a theoretical model that describes how attitude change can occur because of the interaction of variables from one or more of Aristotle's three categories.

What is Persuasion?

Social influence can be thought of as a continuum with coercion at one end and persuasion at other (Perloff, 2003). Whereas coercion forces people to submit to the will

of the coercer, persuasion is “an active attempt to change a person’s mind” (Petty & Cacioppo, 1981). It is important to note that persuasion is different from coercion in that people generally have a choice to make in the persuasion context; they either choose to change their attitudes or they choose to resist changing their attitudes.

Persuasion has been measured by assessing whether a person’s evaluation of an object has changed. In one paradigm, participants' attitude levels are measured pre-test (Petty & Cacioppo, 1981). Next, participants are randomly assigned to experimental and control groups. Then an experimental manipulation (independent variable) is introduced for the experimental group (and not for the control group). Then all participants' attitudes are assessed again (post-test). The experimental group's level of attitude change from pre- to post-test is compared against the control group's level of attitude change. If there is, for example, a greater change in attitude in the experimental group, then it is concluded that the independent variable caused a change in attitudes in the experimental group.

In another paradigm, researchers ask two groups of participants to read a message that contains arguments *for* or *against* the issue at hand (the manipulation is between-subjects). Next, experimenters assess both groups of participants' attitudes toward the issue. If participants' attitudes towards the issue varies between groups (e.g., one group is more favourable toward the issue than the other), then it is inferred that the experimental manipulation of the content of the message changed attitudes.¹

What Are Attitudes? If persuasion involves changing people’s attitudes, then we must know what attitudes are. Daryl Bem (1970) described attitudes: “Attitudes are likes and dislikes. They are our affinities for and our aversions to situations, objects, persons, groups, or any other identifiable aspects of our environment, including abstract ideas and

¹ Throughout this dissertation I will use the terms “persuasion” and “attitude change” interchangeably.

social policies” (D. J. Bem, 1970, p. 14). More recently, Richard Petty and his associates have defined attitudes in terms of evaluations. They defined attitudes as “summary evaluations of objects (e.g., oneself, other people, issues, etc.) along a dimension ranging from positive to negative” (Petty, Wegener, & Fabrigar, 1997, p. 611). There is also a cognitive component to attitudes; they are linked to beliefs (Fiske & Taylor, 1984). Beliefs are cognitive associations people make between the object and attributes (e.g., pasta is good) (Eagly & Chaiken, 1993). Thus, attitudes are the product of cognitive and affective processes (Eagly & Chaiken, 1993).

Why are attitudes important? Attitudes serve several functions. Perloff (2003) noted that some people use attitudes to help them understand the world. That is, attitudes can serve a knowledge function. Attitudes are thought to be a type of schema - a cognitive structure composed of organized information based on past experience (Eagly & Chaiken, 1993). Some attitudes may exist because of past experience, while other attitudes may exist because people hold them in order to be rewarded or to avoid punishment (Eagly & Chaiken, 1993; Perloff, 2003). Other functions of attitudes are: to help people adjust to social situations; to help them form a sense of self; and to help people defend themselves (Eagly & Chaiken, 1993; Perloff, 2003).

We have defined attitudes and have discussed several functions of attitudes, but how can the processes of attitude change be conceptualized? Attitude change that occurs because of high effort (central route) processes involves careful scrutiny of the message's object or issue. By contrast, attitude change that occurs because of low effort (peripheral route) processes does not involve careful scrutiny of the message.

Contemporary Persuasion Research

Early persuasion models tended to approach persuasion from a simple process

approach (i.e., either high or low effort processing), but contemporary persuasion models are multi-process models. For example, the ELM considers the fact that in some circumstances individuals are more likely to engage in high effort processes while in other circumstances these same individuals are more likely to engage in low effort processes. According to Petty and Wegener (1998) one key component of modern persuasion research is the level of mental effort (or elaboration) experienced by the message recipient (Petty & Wegener, 1998). Further, Petty and Wegener (1998) stated that one variable could have different effects on persuasion in different circumstances. For example, a person who is not motivated to effortfully process may be persuaded by an attractive suspect, but a person who is motivated to carefully scrutinize the evidence may not be affected by the suspect's attractiveness.

In Table 1, the elaboration continuum is presented. According to Petty and Cacioppo (1986), recipients who are engaged in high effort processing are at one end of the elaboration likelihood continuum and these recipients take the central route to persuasion (i.e., they are more *likely to elaborate* on the central merits of the issue). Individuals on the central route are more able and more motivated to scrutinize messages, exert more effort when evaluating the message, and use more reasoned thinking. Individuals on the central route are more swayed by the central arguments in a message (e.g., the quality of evidence supporting the statement) and are less affected by rules of thumb, heuristics, and stereotypes.

Recipients who are engaged in low effort processing are at the opposite end of the elaboration likelihood continuum. These recipients take the peripheral route to persuasion (i.e., they are less likely to elaborate on the central merits of the issue, and will likely consider peripheral factors). Peripheral route processors are not motivated and/or are

unable to carefully scrutinize the information in the message. Instead, peripheral processors may use rules of thumb, stereotypes, heuristics, classical conditioning, or attributions when evaluating messages.

Variables Under Study in the ELM

As discussed earlier, the ELM takes into account the effect of several kinds of variables on attitude change. I will discuss the persuasion variables here, but I will examine them and their relation to alibis in more detail in later sections. Just as Aristotle divided persuasion issues into three segments (speaker characteristics, audience characteristics, and message/proof characteristics), contemporary social psychologists have looked at persuasion with these variables in mind. For example, Petty and Wegener (1998) described a model of attitude change in which they considered the effects of four types of independent variables (source, message, recipient, context) and three types of mediating variables (affective, cognitive and behavioural processes) on attitude change (see Figure 1). The model was able to account for the contradictory findings in the earlier literature (e.g., sometimes a credible source increases persuasion, sometimes decreases it) because it took into account the mediating effects of affect, cognition and behaviour (Petty & Wegener, 1998). As shown in Figure 1, an independent variable can impact cognitions, affect or behaviour, and this in turn affects the attitude that is held toward the object (Petty & Wegener, 1998). For example, the attractiveness of a suspect (source) may induce positive feelings (affect) towards that suspect, resulting in positive attitude change. In this dissertation, the mediating variable of interest is cognitive processes (rather than affective or behavioural processes).

Persuasion research on *recipient* variables has focused on several issues. As stated, the amount of mental effort undertaken can affect attitude change. Some recipients

may use heuristics or simple cues when evaluating a message (peripheral route), while others may take a more thoughtful approach to message evaluation (central route) (Petty & Wegener, 1998).

In what circumstances are individuals more likely to process via the central or peripheral route? The route that an individual adopts depends on whether he/she is motivated *and* able to process the message. A person may be *motivated* to carefully process a message (central route) because the message is of great personal relevance to him/her (Petty & Wegener, 1998). For example, students may carefully process a message when they anticipate that they will have to discuss their opinions on the topic with others (Chaiken, 1980). In contrast, people may be less motivated to process a message (peripheral route) because the message is of little personal relevance (e.g., they will not have to discuss their opinions with others). Individuals also vary in their *ability* to process information. Individuals are more likely to process messages carefully when there are few distractions, and when the message is repeated (Chaiken & Eagly, 1976; Petty & Wegener, 1998).

The above examples demonstrate that individuals can be temporarily more or less likely to scrutinize messages; that is, central vs. peripheral processing can be a temporary state. However, in this dissertation I focused on an individual difference measure of level of processing. Some individuals possess a predisposed tendency to *prefer* central over peripheral route processing. Individual differences in the motivation to think carefully about issues can be measured using the Need For Cognition Scale (Cacioppo & Petty, 1982; Cacioppo, Petty, & Kao, 1984). Individuals high in need for cognition (NFC) prefer to think deeply and are more likely to be motivated to think carefully about issues. They are more inclined to be affected by the persuasive arguments in messages and are less

affected by peripheral cues (e.g., stereotypes) than are individuals low in NFC. Individuals low in NFC prefer to avoid deep thinking and instead rely on shortcuts and stereotypes (Petty & Cacioppo, 1986). They are thus less likely to be affected by persuasive arguments and are more likely to be affected by peripheral cues.

In terms of alibi believability, the ELM suggests that people's stereotypes of a crime suspect would affect judgments of the suspect's alibi when people are processing via the peripheral route (i.e., low NFC). In contrast, people processing via the central route (i.e., high NFC) would be less affected by these source stereotypes and instead would scrutinize the message for the strength of its arguments (e.g., the strength of the alibi evidence)².

Researchers have examined *source* effects on persuasion. Source variables are aspects of the person presenting the persuasive message. Researchers have looked at these issues from an elaboration likelihood perspective and have noted that a source's credibility can be persuasive when the recipient is engaging in little scrutiny of the message (e.g., Petty & Wegener, 1998). The source's expertise, trustworthiness, attractiveness, likeableness, power, gender, age and status can affect the likelihood that a message will be scrutinized (Petty & Wegener, 1998). For example, an inexperienced source can lead to greater scrutiny of the message.

What kinds of biases about the source/crime suspect would come into play for individuals low in NFC? Previous research has shown that defendant race can affect guilt ratings (Sargent & Bradfield, 2004). Suspect *gender* may also guide people's perceptions. For example, certain crimes are seen as stereotypically male, and as a result male suspects

² I will use "high NFC" to refer to individuals who possess the tendency to prefer processing via the central route, and I will use "low NFC" to refer to individuals who possess the tendency to prefer processing via the peripheral route.

may be regarded with more suspicion than female suspects (Greenberg, Westcott, & Bailey, 1998). The attractiveness of the suspect may affect people's perceptions. For peripheral route processors, an attractive suspect may be seen as less likely to be guilty because perceivers may apply the "what is beautiful is good" stereotype (Eagly, Ashmore, Makhijani, & Longo, 1991; Petty & Wegener, 1998).

Another important issue is the suspect's criminal record. If a suspect is accused of committing a robbery, how does the knowledge that the suspect has been convicted of robbery in the past affect the believability of his alibi? Would low NFC individuals be swayed by the fact that the accused was convicted of a past crime, even if that crime is *not* similar to the crime in question?

Researchers have examined *message* effects. The message contains a topic (e.g., capital punishment) or an attitude object (e.g., Nike shoes). The source attempts to influence the recipient through the message communication. Persuasive messages usually present the topic or attitude object and they take a position on the issue (e.g., capital punishment is bad or buying Nike shoes is good). Researchers have looked at the impact on attitude change of: the argument's quality (Haugtvedt & Wegener, 1994); argument quantity; and fear appeals. For example, individuals on the peripheral route to persuasion are more persuaded by a larger number of arguments regardless of argument quality (Wood, Kallgren, & Preisler, 1985). For individuals on the central route, increasing the number of strong arguments will also increase persuasion, but increasing the number of weak arguments will reduce persuasion (Petty & Wegener, 1998). Fear has also been used in persuasion. Many anti-smoking campaigns involve the use of fear. The use of fear drives at people's emotions (Perloff, 2003) and is effective if people feel that they can control danger and cope with threats (e.g., quit smoking right away). However, the use of

fear can fail if individuals are too scared and feel that they are unable to cope (e.g., continue smoking to deal with fear of death) (Perloff, 2003).

Relating message variables to the study of alibis, Olson and Wells (2004) found that the strength of the alibi evidence affected alibi believability ratings. They found that alibis (the message) that were supported by physical evidence that was difficult to fabricate (e.g., ATM videotape) and were corroborated by a non-motivated person (e.g., restaurant server) were more believable than alibis that were supported by physical evidence that was easy to fabricate (e.g., restaurant receipt) and were corroborated by a motivated person (e.g., suspect's brother). Individuals high in NFC may be swayed by the strength of the alibi evidence. A strong alibi (i.e., one with strong supporting evidence) may mean that there is reasonable doubt of the suspect's guilt, while a weak alibi may work against the suspect (Olson & Wells, 2004). ELM research suggests that individuals on the central route are more likely to weigh the strength of the evidence carefully, while individuals on the peripheral route are less likely to be influenced by this variable.

Finally, recent persuasion research has looked at the impact of context variables on attitude change. Several contextual variables have been explored (e.g., mood, speed of speech, self-awareness) but there is no clear "cluster" of context variables (Petty, Wegener, & Fabrigar, 1997). An issue of concern to the legal system is the impact of judicial instructions on jurors (a system variable). Judicial instructions do not fit neatly into the source variable category (although they can involve instructions about how jurors are to use source information). Persuasion researchers would probably label judicial instructions as a context variable (Petty & Wegener, 1998). Jurors are often instructed that they cannot use knowledge of prior convictions to make *character* inferences about the defendant (H. Stewart, 2002). That is, a suspect with prior convictions cannot be seen

as a bad person – the kind of person who may have committed the current offense. Jurors are often instructed that they can only use prior conviction evidence to make inferences about the defendant's *credibility* (i.e., the weight given to his testimony), not his/her *guilt* for the particular crime in question (e.g., prior convictions do not necessarily mean that he/she committed the current offence).

Judicial instructions are often complex and difficult to understand (e.g., Severance, Greene, & Loftus, 1984). A careful examination of people's understanding of instructions is warranted: do participant-jurors use prior conviction evidence according to judicial instructions? Will perceivers on the peripheral route be swayed more by the knowledge of prior convictions than those on the central route, because central route processors will scrutinize the judges' instructions more carefully and will thus be more likely to adhere to them?

Alibi believability, the topic of this dissertation, can be studied from an ELM perspective. The suspect is the source of the message. The message is the alibi itself (e.g., "I didn't do it, I was across town at a restaurant"). The recipients of this particular message are social perceivers (e.g., police, jurors). The context in which perceivers receive alibi information can also be important (e.g., judicial instructions regarding prior conviction evidence). There have been few empirical studies on alibis, and the two of the three most recent studies have examined only "message" variables (factors relevant to the alibi itself), with no regard for contextual factors and suspect and recipient characteristics. Sargent and Bradfield (2004) did consider several variables, but did not examine judge's instructions (a contextual variable). More detail on the research on each of these four categories follows.

Message Variables: The Strength of the Alibi Evidence

"An alibi, in addition to being one of the best means of exculpation of the innocent, is also one of the best ploys of the guilty"

(Eldridge, 1978, p. 773)

Participants on the central route to persuasion (high in NFC) may pay careful attention to the strength of the suspect's alibi. What kind of evidence supports the suspect's alibi? How strong is this evidence? In the first published empirical paper devoted entirely to alibis, Olson and Wells (2004) discussed how the strength of the alibi evidence affected the alibi's believability. They created a taxonomy of alibi evidence that included two dimensions: physical and person alibi evidence. Although they included "person" alibi evidence, their study did not address *source* characteristics specifically. Rather, in their study, "person" evidence referred to the individual who corroborated the suspect's alibi (Olson & Wells, 2004). This evidence was included as a way to manipulate the strength of the evidence supporting the alibi. Alibis that were corroborated by a person who was familiar with the suspect and motivated to lie for him (e.g., family member) were seen as weak. Alibis that were corroborated by a familiar but unmotivated individual (e.g., regular server in a restaurant) were seen as strong. Olson and Wells (2004) did not investigate the *suspect's* characteristics to see how they influenced the believability of the alibi. Rather, they looked at *message* characteristics pertaining to alibi believability.

Culhane and Hosch (2004) also studied characteristics of the alibi corroborator. In their study, alibis were: corroborated, not corroborated or were ambiguously corroborated. The corroborator was either the suspect's girlfriend or neighbour. The authors hypothesized that alibis that were corroborated by another individual would be

more believable than those that were not clearly corroborated, and that a corroborator who had a close relationship with the suspect would not serve to bolster the alibi. Indeed, they found that participant-jurors were more likely to acquit a defendant whose alibi was supported by a stranger (i.e., neighbour) than a defendant whose alibi was supported by his girlfriend or had no alibi witness at all. As in Olson and Wells (2004), Culhane and Hosch (2004) did not study characteristics of the suspect. Instead, they studied the impact of variables that influenced the strength of the alibi (i.e., the existence of corroboration and characteristics of the corroborator) (Culhane & Hosch, 2004). These variables were included as a means to bolster the alibi evidence itself: believable and strong alibis were those that were supported by strangers.

One alibi study investigated a source characteristic (race) and a recipient characteristic (motivation). Sargent and Bradfield (2004) were interested in the impact of the defendant's race on *guilt* judgments (not alibi believability). They also manipulated the strength of the defendant's alibi. In the strong alibi condition, participants read that the defendant had security camera footage from the restaurant where he had his dinner. In the weak alibi condition, the waitress who served the defendant could not be found and there was no security camera footage. Their results showed that when participants had little motivation to process the alibi, they were sensitive to alibi strength only when the suspect was Black (vs. White, Sargent & Bradfield, 2004)³. That is, the Black defendant was seen as more likely to be guilty when his alibi was weak rather than strong and the strength of the alibi did not affect perceptions of the White suspect. When participants were more motivated to process the alibi, they rated the defendant as more likely to be guilty when his alibi was weak than when it was strong. Defendant race did not affect

³ This is the terminology used in Sargent & Bradfield (2004).

guilt ratings for high motivation participants.

Strength of Alibi Evidence

Olson and Wells' (2004) design and results will now be discussed in some detail because their stimuli and measures were used in this dissertation. When perceivers are processing the information in an alibi, how does the strength of the alibi evidence affect alibi believability? As stated, Olson and Wells' (2004) taxonomy of alibi evidence included two dimensions: person and physical alibi evidence. Physical alibi evidence was described as being physical forms of evidence in support of the alibi. Strong physical evidence was difficult to fabricate and difficult to refute. For example, videotaped footage of the suspect in a location other than the crime strongly supported the suspect's plea of innocence. Weak physical evidence could be refuted more easily because it would be easy to fabricate (e.g., restaurant receipts).

The other dimension that Olson and Wells (2004) described was person evidence. Motivated people who were familiar with the suspect (e.g., spouse, brother) were seen as relatively weak forms of person evidence because, although familiar with the suspect and not likely to be mistaken about identity, they were potentially motivated to lie. According to the authors, *non-motivated strangers* (i.e., someone who did not know the suspect) would make the alibis more believable because this type of evidence was more difficult to fabricate. One drawback of this form of evidence was that strangers could be mistaken about the identity of the person they saw. The authors hypothesized that the strongest person evidence would come from non-motivated but familiar others (e.g., regular server in a restaurant); they would be less likely to make identity mistakes and less motivated to lie.

Olson and Wells (2004) created a police report describing a convenience store

robbery. The experimenter told participants that the police investigation had reached a dead end and that they (acting as detectives) were going to evaluate the suspects' alibis. The authors created several forms of alibis that varied in level of supporting physical evidence (none, easy to fabricate, difficult to fabricate) and person evidence (none, motivated familiar other, non-motivated stranger, non-motivated familiar other). After reading one alibi, participants were asked to rate its believability and they were asked to rate the probability that the suspect committed the crime (i.e., suspect guilt). Finally, participants were asked to rate the suspect on several different character traits concerning the suspect's believability (e.g., suspicious) and traits unrelated to believability (e.g., funny).

The results showed that when there was *no* physical evidence: alibis supported by non-motivated *strangers* were seen as more believable (vs. no supporting person evidence and motivated others); and alibis supported by non-motivated *familiar* others were seen as more believable than alibis with no supporting person evidence. Thus alibis from a stranger or server were more believable than alibis that were not supported by anyone (e.g., home alone) (Olson & Wells, 2004).

In terms of physical evidence, alibis with no physical evidence were less believable than alibis with strong physical evidence. In addition, alibis with easy-to-fabricate physical evidence were seen as more believable than alibis with no supporting physical evidence of any kind (thus even weak physical evidence was better than none at all). However, alibis with difficult-to-fabricate physical evidence were seen as *most* believable.

Person evidence affected *guilt* ratings only when there was no supporting physical evidence: suspects whose alibis were supported by non-motivated strangers were seen as

less likely to be guilty than suspects whose alibis were not supported by anyone. Suspects with easily-fabricated and difficult-to-fabricate *physical* evidence were rated as less likely to be the criminal than suspects with no supporting physical evidence. There was one significant interaction. When there was no person evidence to corroborate the alibi, guilt ratings were higher for suspects with no physical evidence and lower for suspects with difficult-to-fabricate physical evidence.

Correlations between *character* traits and the alibi believability measure revealed that several traits were significantly correlated with believability (e.g., positively correlated: honest, intelligent; negatively correlated: deceitful, suspicious, cunning). Eight traits (e.g., content, shrewd) were not significantly correlated with believability. Olson and Wells (2004) considered traits that were correlated with believability to be “relevant” traits, and traits that were not correlated to be “irrelevant” traits. They averaged all relevant traits together and all irrelevant traits together to create single “relevant” and “irrelevant” scores for every participant.

There were no significant interactions of person evidence and physical evidence on relevant and irrelevant character trait scores. However, participants rated suspects as more suspicious and conniving etc. when there was no physical evidence than when there was difficult to fabricate physical evidence. Similarly, suspects were rated as more suspicious etc. when there was no person evidence than when there was evidence from a non-motivated stranger.

Olson and Wells' (2004) results supported their hypotheses that people differentiate between the different levels of person and physical evidence. Difficult-to-fabricate physical evidence overwhelmed person evidence. However, the authors were surprised to discover that easy-to-fabricate physical evidence also overwhelmed person

evidence. That is, an alibi supported by a receipt alone was as believable as an alibi supported by a receipt and was corroborated by non-motivated others.

In terms of dependent measures, Olson and Wells (2004) found that the alibi believability and suspect guilt measures evoked the same patterns of responses in participants. They were surprised that the highest mean believability rating (i.e., when the alibi evidence was strongest) was only 7.4/10. They suggested that it is possible that participants view alibis with skepticism; they felt that “alibi is an extremely loaded term” (Olson & Wells, 2004, p. 174). The authors suggested that people who are asked to provide alibis may be seen as more likely to be guilty of the crime than people who are not asked to provide alibis (Olson & Wells, 2004).

Olson and Wells (2004) launched a new area of inquiry in the psychology and law realm: the psychology of alibis. There are several avenues of research that remain. How do characteristics of the suspect affect alibi believability and suspect guilt ratings?

Source Variables: Gender, Attractiveness, and Prior Convictions

Beauty itself doth of itself persuade

The eyes of men without an orator.

(Shakespeare, The Rape of Lucrece)

What kinds of biases about the source/suspect might come into play for individuals on the peripheral route to persuasion? One study examined the impact of defendant race on guilt ratings (Sargent & Bradfield, 2004). In that study, Black defendants were seen as more likely to be guilty when they had a weak rather than strong alibi (for White defendants the strength of the alibi did not matter). Alibi believability measures were not included in the study. How do other suspect characteristics affect the believability of alibis? The suspect's gender may guide people's perceptions through the

use of gender schemas and stereotypes. Are men treated more harshly than women? The physical attractiveness of the suspect may affect alibi believability, such that more attractive suspects may be treated leniently when compared with less attractive suspects. Similarly, a suspect who has been convicted of crimes in the past may be viewed quite negatively. This section will discuss gender bias, physical attractiveness, and prior conviction evidence.

Gender Bias

Schemas. A schema is “a cognitive structure, a network of associations that organizes and guides an individual’s perception. A schema functions as an anticipatory structure, a readiness to search for and to assimilate incoming information in schema-relevant terms” (S. L. Bem, 1981, p. 355). That is, schemas are abstract constructs that guide the way in which people perceive, attend, encode, and respond to information (Ruble & Stangor, 1986).

A *person schema* pertains to schemas about people’s traits and goals (Fiske & Taylor, 1984). These schemas help people to categorize others. Imagine a prototypical armed robbery. This may bring to mind certain information about the robber (e.g., male, lower SES) and the situation (e.g., convenience store, bank). We may be able to bring to mind a lot of information about the armed robbery. This kind of “person-in-situation schema is rich in content and easily accessible” (Fiske & Taylor, 1984, p. 150). A *role schema* involves broader, often visual categories like gender, race and age (Fiske & Taylor, 1984). Thus, if a perceiver meets a new person, then this person will be categorized on the basis of that visual information (e.g., as white, young, and male).

How do schemas affect processing in adults? Many studies have found that schema-consistent information is better remembered than schema-inconsistent

information (see Ruble & Stangor, 1986, for a review). However, there also exist conflicting results from studies in which schema-inconsistent information is better remembered, presumably because it is unexpected, novel and is processed more deeply (Ruble & Stangor, 1986).

Gender Schemas. It appears that the studies involving *gender* schemas are more clear-cut than the general schema studies, perhaps because gender schemas are so pervasive. "Gender" refers to cultural categories of male and female, whereas "sex" refers to biological status (Pyke & Graham, 1983). People appear to have "well-defined knowledge structures regarding the characteristics associated with gender" (Ruble & Stangor, 1986, p. 229). How do gender schemas affect processing in adults? "Perceivers generally notice, remember and behave in ways consistent with their gender schemas" (Martin, 1991, p. 117). Gender schemas affect attention, memory, and behaviour. Thus, "[t]he distinction between male and female serves as a basic organizing principle for every human culture" (S. L. Bem, 1981, p. 354).

Gender schemas have been extensively studied in developmental psychology in part because the gender concept is important to children (Ruble & Stangor, 1986). Children learn at a young age that information can be processed in terms of gender (e.g., people, toys, chores, etc.) (Martin, 1991). In children as young as 3-5 years, gender knowledge affects the processing of information (Ruble & Stangor, 1986). Children of school age (5-7 and 8-10 years) show better memory for gender-consistent information than children of preschool age (3-5 years) (Ruble & Stangor, 1986). In addition, younger children often report gender-consistent information when in fact gender-inconsistent information was presented. That is, younger children will distort the stimuli so that they represent more traditional gender views (Ruble & Stangor, 1986).

How do gender schemas affect adults' attention, memory and behaviour? Several studies have examined the relationship between self-concept and gender schema use. Participants who define themselves according to their gender (on a sex-role inventory) are labeled as "sex-typed" in these studies. Sex-typed individuals have been found to *recall* words associated with their gender better than words associated with the opposite gender (e.g., Markus, Crane, Bernstein, & Siladi, 1982; Mills, 1983). For example, a feminine-typed person was more likely than a masculine-typed person to remember feminine items from a list of trait adjectives (Markus et al., 1982).

Sex-typed individuals also recall words associated with their gender *faster* than words associated with the opposite gender (e.g., Markus et al., 1982; Mills, 1983). This suggests that gender information is more readily accessible in sex-typed individuals (Ruble & Stangor, 1986). In a similar study, Bem (1981) found that sex-typed individuals *process* information according to gender schemas more so than individuals who are not sex-typed. In this study, sex-typed individuals recalling words from a list were more likely to cluster the words on the basis of gender than were non sex-typed individuals (S. L. Bem, 1981). What effect do gender schemas have on *behaviour*? Gender schemas affect children's choice of toys and playmates (e.g., Martin, 1991). With all adults (sex-typing aside), gender schemas can affect how they classify people into male and female categories; participants can easily classify people on the basis of their gender (e.g., Taylor, Fiske, Etcoff, & Ruderman, 1978).

Stereotypes. Stereotypes are beliefs held about a group of people (Eagly & Chaiken, 1993). They are "beliefs about the correlation between group membership (e.g., male/female) and certain characteristics (e.g., aggressiveness)" (Hepburn, 1985, p. 772). Stereotypes are thought to be the cognitive component of prejudice (Fiske, 1998). That is,

prejudice is the *affect* associated with a certain group of people, stereotypes are *beliefs* about the group, and discrimination is the *behaviour* against individuals because of their group membership (Fiske, 1998). Stereotypes can affect the way in which people process information about the world. What relationship do stereotypes have with schemas? Stereotypes can *promote* the use of schemas. In fact, Mortimer (1993) defined schemas as "collections of stereotypical knowledge" (p. 13). People do not need to be consciously aware of their stereotypes in order to use them. Individuals who are low in prejudice (i.e., do not express explicit negative affect) can use stereotypes without being consciously aware of them (Fiske, 1998). That is, stereotypes can unconsciously affect people's reactions to social information (Wittenbrink, Judd, & Park, 2001).

Gender Stereotypes. What *gender* stereotypes do children hold? Children have reported that they would react negatively to children who play in non-gender conforming ways (e.g., boys who played with dolls, girls who played with trucks) (Carter & McCloskey, 1983-1984). Children stated that they would also react negatively to children whose friends were of the opposite gender. Negative views of such cross-gender behaviour were particularly evident among older children (fourth- and sixth-graders) (Carter & McCloskey, 1983-1984). In Carter and McCloskey (1983-1984), children were less tolerant of cross-gender behaviour in boys than in girls. Most children felt that cross-gender behaviour was not wrong, but they felt that they would not want to associate with a child who engaged in this sort of behaviour. School-age children appear to possess clear gender stereotypes about gender-appropriate behaviour.

Gender stereotypes persist in adults who are confronted with many examples of sexual equality. One reason for this finding may be that adults judge events that fit their stereotypes as occurring more often than non-stereotypical events (Hepburn, 1985). In

one study, adults watched a videotape of actors performing stereotypical male (e.g., doing push-ups) and female (e.g., combing hair in front of mirror) activities, and neutral activities (e.g., writing on the blackboard) (Hepburn, 1985). After viewing the video, participants were asked to judge how often they had seen a certain behaviour. The results indicated that stereotypical male and female activities were judged to have occurred more often than the neutral activities, when in fact the three types of activities were presented the same number of times. The author suggested that gender stereotypes may persist because gender stereotypes are easily accessible (Hepburn, 1985). As a result, the frequency of stereotypical behaviour may be over-estimated.

Crime Bias: Schemas and Stereotypes. Most people possess a basic schema of the typical criminal. The typical criminal has committed a crime and deceives legal authorities (Ruby & Brigham, 1996). In terms of crime stereotypes, there have been several studies on the *racial* stereotypes of criminals, but few studies on *gender* stereotypes of criminals. While there is a dearth of research on gender stereotypes related to crime and criminals, it is reasonable to assume that if general gender stereotypes and schemas are well-formed in adults (e.g., Fyock & Stangor, 1994), then it is likely that they will also hold well-formed gender stereotypes of the "typical criminal".

In their first study, Greenberg, Westcott and Bailey (1998) asked participants to describe a typical convenience store robber and victim. Participants described the typical robber as White, and *male* with a mean age of 24 years. Participants felt that typical robberies occurred when there was no one but the clerk in the store, and that the robbery took 6.97 minutes on average (Greenberg et al., 1998). The typical store clerk was described as being White, female with a mean age of 31 years. This study suggests that people hold stereotypes of *men* as typical convenience store robbers.

How are such stereotypes and schemas formed? Stereotypes and schemas can be formed based on past experiences (Stalans & Lurigio, 1990). However, most people do not have personal experiences with crimes and criminals (e.g., Holst & Pezdek, 1992). Less than 10% of participants in Greenberg et al. (1998) and less than 12% of participants in Holst and Pezdek (1992) had direct personal experience with robberies. Participants have stated that they gained knowledge about robberies from television, news media, and movies (Greenberg et al., 1998; Holst & Pezdek, 1992). Thus, it is likely that people's crime stereotypes are based on media exposure.

There is some evidence that suggests that gender stereotypes persist in the courtroom. Social science studies of gender stereotypes have found a gender-leniency effect in sentencing. The length of a male offender's sentence is longer than that of a female offender when they have committed similar crimes (e.g., Finn & Stalans, 1997; Fosterlee, Fox, & Ho, 2004; Nagel & Johnson, 1994).

Attractiveness

In the persuasion literature, source attractiveness/likeableness has been found to have the most impact when individuals are processing via the peripheral route (low NFC) (Petty & Wegener, 1998). Research on physical attractiveness and person perception suggest that a stereotype exists in which attractive people are thought to also possess other positive qualities (Eagly et al., 1991). This has been referred to as the "what is beautiful is good" stereotype (Dion, Berscheid, & Walster, 1972).

Dion et al. (1972) were the first to systematically study this stereotype. They hypothesized that physically attractive individuals are thought to possess more socially desirable personality traits and lead better lives (e.g., better spouses, parents, friends, and more success in careers). Participants in their study were asked to evaluate photographs of

attractive, average, and unattractive men and women on numerous personality traits and life experiences. The results revealed that attractive people were judged to be more socially desirable, were expected to achieve more occupational success, had happier marriages, would be better spouses, would have happier and more successful social and professional lives, and were more likely to marry than unattractive people (Dion et al., 1972). The results suggest that social perceivers hold a "what is beautiful is good" stereotype: beautiful people are thought to possess more socially desirable personalities and are thought to lead more successful and happier lives than unattractive people.

Numerous studies suggest that the "what is beautiful is good" stereotype is "a strong and general phenomenon" (Eagly et al., 1991, p. 109). What effect does this have on the ways in which attractive people are treated? Attractive individuals are more likely to receive help, rewards, and compliance from others (Alley & Hildebrandt, 1988; Hatfield & Sprecher, 1986). Attractiveness can affect the ways in which teachers interact with students, the hiring of employees, salary decisions and promotions, and the therapist-client relationship (Hatfield & Sprecher, 1986). Physical attractiveness has an important role to play in the romantic process as well (Patzner, 1985). Research suggests that "for the most part, both young men and young women choose a heterosexual partner whose level of physical attractiveness is similar to their own" (Dion, 1981, p. 4).

Attractiveness and the Legal System. How are attractive individuals treated in the legal system? Before reaching the courtroom, attractiveness can affect perceptions of suspects and criminals. For example, attractive criminals are less likely to be caught (Mace, 1972) and are less likely to be reported (Deseran & Chung, 1979; Steffensmeier & Terry, 1973). What effect does attractiveness have in the courtroom? In civil trials, attractive defendants lead to lower damages being awarded to plaintiffs (Lieberman,

2002), while unattractive defendants lead to higher damages being awarded to plaintiffs (Kulka & Kessler, 1978).

Research shows that attractive criminals often have an advantage, called the “attractiveness-leniency” effect (Efran, 1974; Leventhal & Krate, 1977; Solomon & Schopler, 1978; J. E. Stewart, 1980). For example, defendant attractiveness affects juror *guilt* ratings in criminal trials. In general, mock juror studies show that attractive defendants are less likely to be convicted of crimes when compared with unattractive defendants (Abwender & Hough, 2001; Darby & Jeffers, 1988; MacCoun, 1990; Saladin, Seper, & Breen, 1988). Attractive defendants are also more likely to receive more lenient *sentences* (Abwender & Hough, 2001; Darby & Jeffers, 1988).

What factors mediate the attractiveness-leniency effect? The strength of evidence against the criminal defendant is one important factor. For example, when there was relatively weak evidence against the defendant in a simulated rape trial, unattractive defendants received harsher *sentences* compared with attractive defendants (Erian, Lin, Patel, Neal, & Geiselman, 1998). However, when there was stronger evidence against the defendant, defendant attractiveness did not affect sentencing. The importance of strength of evidence was also studied in Baumeister and Darley (1982). They found that the attractiveness-leniency effect was reduced when participant-jurors were presented with more precise evidence in the case.

There is one exception to the attractiveness-leniency effect. The type of crime that the defendant is accused of committing affects participant-juror judgments. What if the defendant used his attractiveness to commit the crime (e.g., using looks to *swindle* money/con game)? In such circumstances, attractive defendants actually received harsher sentences than unattractive defendants (Sigall & Ostrove, 1975; Wuensch, Chia,

Castellow, & Chuang, 1993). For example, attractive *burglars* were given lenient sentences when compared with attractive *swindlers* (Wuensch et al., 1993).

Stereotype Origins. Implicit personality theory has been used to explain the existence of the “what is beautiful is good” stereotype (e.g., G. R. Adams, 1982; Eagly et al., 1991). This theory deals with the assumptions people make about which character traits “go together” (Schneider, 1973). For example, if we meet someone who is kind to us, we may assume that they possess many positive traits. In contrast, if we meet someone who has an unpleasant trait (e.g., is rude), then we may infer that this person possesses many unpleasant traits. In terms of attractiveness, the attractiveness trait (a good trait) is seen to exist along with other good traits (e.g., sociable, no tendency for criminal behaviour, etc.).

Another possible explanation is the self-fulfilling prophecy. The self-fulfilling prophecy is the process in which social perceivers’ expectations about a target person lead to changes in the target’s behaviour according to those expectations (Fiske & Taylor, 1984). Thus the perceiver forms an initially false impression of the target, treats the target according to the impression, and as a result the target’s behaviour changes (in the direction of the false impression). In terms of attractiveness, we may hold preconceived notions of unattractive and attractive people (e.g., attractive-sociable, unattractive-asocial). Our preconceived notions may affect our behaviour towards them. In turn, this may cause these people to respond to us in different ways, confirming our expectations of them (Dion, 1986). For example, if we are friendly towards attractive people because we believe them to be sociable, then it is likely that they will be friendly to us in return.

Although attractive individuals generally receive benefits from being attractive, it must be noted that there is a limit to the “what is beautiful is good” stereotype. Dermer

and Thiel (1975) found that attractive female targets were perceived to possess both positive and negative traits. They replicated Dion et al.'s (1972) findings that attractive women are thought to be more sociable, happy, and successful. However, attractive women were also perceived as more likely to be conceited, engage in adultery, and be snobbish or unsympathetic to less fortunate people (Dermer & Thiel, 1975).

Prior Convictions

A suspect on trial for a crime may have committed other crimes in the past. This information can be introduced at trial so that jurors can use it to assess the suspect's credibility. This evidence can be introduced if it is relevant to a fact at issue in the trial and if the judge has found that its probative value outweighs its potential for prejudice (Greene & Dodge, 1995). Prior conviction evidence is not to be used to make inferences about the suspect's *guilt*. Jurors can use this information only for *credibility* decisions, not for guilt decisions.

Research has shown that when participant-jurors know that a suspect has been convicted of a prior offense, they are more likely to find the suspect *guilty* (Clary & Shaffer, 1985; Greene & Dodge, 1995; Myers, 1980; Wissler & Saks, 1985). Prior conviction evidence also tends to lead to lowered defendant credibility ratings (Tanford & Cox, 1988), more negative sentiments toward the defendant (e.g., amoral, bad, unlikable) (Clary & Shaffer, 1985), more pro-conviction statements during mock jury deliberations (Clary & Shaffer, 1985), greater confidence in guilty votes (when prior conviction was for a similar crime) (Clary & Shaffer, 1985), and more severe sentencing recommendations (Clary & Shaffer, 1985). The dependent measures used in this dissertation included guilt ratings (as above), an alibi believability rating, and ratings of the suspect's character (based on Olson & Wells, 2004, see Method section of Study 2)

because prior conviction evidence could lead to higher guilt ratings, lower alibi believability ratings, and more negative character ratings.

Does any kind of prior conviction increase guilty votes, or does the type of crime (similar to or different from the current charge) affect participant-jurors' perceptions of suspects? Wissler and Saks (1985) suggested that including different types of crimes in their experimental design could better determine whether participant-jurors use prior conviction evidence in legally appropriate ways. For their prior conviction manipulation, they included four different conviction levels: same crime; different crime; perjury; and control (no mention of prior crime). The prior conviction for perjury condition was included because this crime speaks directly to the suspect's credibility and jurors are supposed to use prior conviction evidence only to assess credibility (Wissler & Saks, 1985).

Participants in Wissler and Saks (1985) read a description of a hypothetical auto theft or murder and then read the prior conviction evidence. Next, participants read the case description and a warning that the prior conviction evidence could not be used as an indication that the suspect had criminal tendencies/dispositions but could only use the evidence to assess believability (this was a shortened version of a jury charge from the State of Massachusetts). Finally, participants rated the suspect's guilt, their certainty in their decisions, and the suspect's credibility.

Suspects with no prior convictions received lower conviction rates than suspects with any kind of conviction (Wissler & Saks, 1985). However, the type of prior offense mattered. Suspects convicted of a similar past crime had higher conviction rates compared to those convicted of perjury or a dissimilar past crime. Even when the researchers controlled for credibility (using an analysis of covariance), prior convictions

still affected conviction rates.

Participants were also asked how much the prior conviction evidence influenced their decisions (Wissler & Saks, 1985). Fifty-six percent of the participants stated that this evidence increased the likelihood that the suspect was guilty. When the current crime was auto-theft, participants who read that the suspect had been convicted of auto-theft before reported that the prior conviction evidence influenced their decisions more so than participants who read that the defendant had been convicted of perjury before (Wissler & Saks, 1985). When the current crime was murder, prior murder and perjury convictions influenced participant-juror decisions more so than a prior auto-theft conviction. The questionnaire also asked participants to rate their certainty in their verdict decisions. Wissler and Saks (1985) found no relationship between participants' *certainty* and the prior record condition. They also found no relationship between suspect *credibility* and prior conviction.

The Wissler and Saks (1985) study has important implications for the legal system. As stated, evidence of a suspect's prior record has limited use in the courtroom. However, participants in their study did not use the evidence to assess the suspect's credibility, but did use the information to determine guilt in spite of the fact that they were instructed *not* to use the evidence in this way. Wissler and Saks' (1985) study also showed that participants were affected by the *type* of prior offence; the similarity of the past crime to the current charge was important.

The authors suggested that participants may not have been as concerned with the consequences of their decisions for suspects who had a prior record. That is, a wrong decision would not have had as great an impact on a seasoned criminal than on a person who had never been in prison before (Wissler & Saks, 1985). Wissler and Saks (1985)

also noted that their participants probably made dispositional *attributions* (e.g., prior record = bad person) when they were presented with the prior conviction information. Attribution theory states that socially undesirable behaviour often leads to dispositional inferences (Hamilton & Zanna, 1972). Thus, past criminal behaviour (even for dissimilar crimes) likely led to dispositional inferences and caused participants to use the evidence in legally inappropriate ways (i.e., by ignoring the judge's instructions, Wissler & Saks, 1985).

Context Variables: Judicial Instructions

It would be an absurdity for jurors to be required to accept the judge's view of the law, against their own opinion, judgment, and conscience.

(J. Adams, 1735-1826)

Section 12 of the Canada Evidence Act states that defendants can be cross-examined about their prior convictions. If the accused denies the prior convictions, then the Crown is permitted to introduce evidence that proves the prior convictions ("Canada Evidence Act," 2003). As stated, jurors are often instructed that they cannot use knowledge of prior convictions to make character inferences (H. Stewart, 2002). That is, jurors cannot use the prior record evidence to infer that the suspect was the sort of person to commit crimes (H. Stewart, 2002). Instead, prior convictions can be used to assess credibility or to assign weight to testimony.

Judges give jurors strict instructions on the use of prior conviction evidence. As discussed earlier, judicial instructions are system variables; they are variables that are under the control of the legal system (Wells, 1978). It is important to study people's understanding of and use of judicial instructions because policy recommendations can be made based on social science research.

Do participant-jurors use prior conviction evidence according to judicial instructions? As described in the previous section, Wissler and Saks (1985) found that in spite of the presence of judicial instructions, participants still used prior conviction evidence to determine *guilt* (not credibility). Other studies have also found that instructions can have a limited effect on participant-jurors' use of prior conviction evidence. Pickel (1995) found that hearing about a suspect's prior conviction increased guilty votes and the weight given to the evidence. Participants in that study were instructed on the admissibility of prior conviction evidence. Participants were asked to use the prior conviction evidence only to assess the suspect's *credibility*. However, suspect credibility ratings were not affected by the instructions regarding admissibility. As in Wissler and Saks (1985), participants were using the prior conviction evidence in their verdict decisions but not in their credibility decisions (Pickel, 1995).

Another study showed that participant-jurors cannot disregard prior conviction evidence even when instructed. Greene and Dodge (1995) asked participants to read a summary of a bank robbery trial. They found that there were more convictions when participants knew the suspect had a prior record (vs. control) and judges' limiting instructions did not affect conviction rates (Greene & Dodge, 1995). That is, conviction rates did not vary as a result of the presence or absence of limiting instructions.

Greene and Dodge (1995) found one effect for instructions. Participants were asked to indicate the minimum percentage of evidence they required to find a defendant guilty beyond a reasonable doubt (i.e., how much evidence did they require for a conviction?). When defendants were acquitted in a previous case, participants in the instructions-present condition stated that they needed more evidence to convict when compared with participants who were not given instructions. The authors suggested that

judicial instructions had a limited influence on participant-jurors' *threshold* for conviction. Greene and Dodge (1995) suggested that the limited influence of instructions may be due to the fact that instructions are difficult to understand.

Why are judicial instructions often complex and difficult to understand?

Researchers have noted that judges are reluctant to stray far from statute and the language used in superior courts because defendants may appeal if they feel there were errors in the instructions (Severance et al., 1984). Misunderstandings can occur because the instructions are ambiguous or are misinterpreted (because of vocabulary choice, manner of presentation) (Severance et al., 1984). Indeed, empirical studies have shown that participant-jurors perform poorly on comprehension measures (Severance et al., 1984) and have difficulty correctly paraphrasing judicial instructions (Goodman & Greene, 1989).

Recipient Variables: Central and Peripheral Route Processing and Need for Cognition

To most people nothing is more troublesome than the effort of thinking.

(Bryce, 1901)

Whether or not an individual is on the peripheral or central route to persuasion is dependent upon the individual's current state and underlying disposition. There are some circumstances which "push" an individual to one or the other end of the ELM continuum (temporary state). There are also individuals who are predisposed to processing at one end of the continuum (i.e., the underlying trait of need for cognition).

Central vs. Peripheral Processing as a Temporary State

Many persuasion studies have examined those temporary circumstances (state) in which a person is more likely to process via the peripheral or central route. Motivation and ability are key factors that affect message processing. Motivated individuals who are

able to scrutinize messages are more likely to process via the central route, while individuals who are not motivated or able are more likely to process via the peripheral route. Factors that can affect a person's ability to process messages are distractions, message repetition and message modality (Petty & Wegener, 1998). One factor that can affect a person's motivation to process messages is personal relevance (the more relevant, the higher the motivation) (Petty & Wegener, 1998).

More recently, Sargent and Bradfield (2004) manipulated participants' motivation to process a message concerning a defendant's alibi. High motivation participants were told that the study's results would be used to improve real jury instructions, their decisions would be compared to the decision of a real jury (i.e., accuracy was important), and they would be paid for their participation only if they came to the correct decision. Low motivation participants were told that they were participating in a pilot study and were not told anything about accuracy and were paid immediately once they consented to participate. The ecological validity of this motivation manipulation is limited given that one would hope that all jurors in the real world are motivated to be accurate. In addition, real jurors are paid a nominal fee and monetary incentives should not be a factor for them.

However, as stated earlier in the "Message Variable" section, the Sargent and Bradfield's (2004) motivation manipulation did cause their low and high motivation participants to behave differently from one another. In the low motivation condition, the strength of the alibi affected judgments of the Black defendant's, but not the White defendant's, guilt. That is, low motivation participants looked to the alibi's strength only when the defendant was Black. In the high motivation condition, defendant race did not affect guilt ratings and guilt was based on the strength of the alibi evidence alone.

The authors suggested that even though some participants were not motivated to

carefully scrutinize the alibi evidence (low motivation condition), they *did* scrutinize the alibi evidence if the defendant was Black. Thus defendant race in Sargent and Bradfield (2004) did not act as a peripheral cue; seeing a Black defendant did not push participants on to the peripheral processing route. Instead, participants who saw the Black defendant were pushed on to the central processing route. The authors speculated that their White participants may have been sensitive to the defendant's race because they were actively working against their negative biases of Blacks. Thus participants in this condition became motivated to process the information because they wanted to counteract their automatic biases. Please note that Sargent and Bradfield (2004) did not include a measure of their participants' underlying disposition to prefer central or peripheral processing (NFC, see next section).

Central vs. Peripheral Processing as an Underlying Tendency: Need for Cognition

Cacioppo and Petty (1982) studied individual differences in the "tendency to engage in and enjoy thinking" (p. 116). They developed the Need for Cognition Scale. This scale was created to distinguish between people high in NFC (who enjoy cognitive activities) and people low in NFC (who avoid expending effort on thinking). NFC is thus a trait (underlying disposition, general tendency towards thinking or avoiding thinking) rather than a state (temporary, may think more or less because of the current situation).

The scale development started with a collection of 45 items (e.g., "I really enjoy a task that involves coming up with new solutions to problems"). Participants indicated their degree of agreement/disagreement with the statements on a scale from -4 to +4. In the first study, university faculty members (who presumably enjoy thinking) and assembly line workers (who perform repetitive tasks) completed the scales (Cacioppo & Petty, 1982). Thirty-four of the items discriminated between the two groups and they

loaded on to one factor which the authors labeled as “need for cognition”. In studies 2-4, Cacioppo and Petty (1982) used the 34-item scale on a more homogeneous sample (university students) and found that NFC was different from test anxiety, cognitive style, unrelated to social desirability measures, and positively correlated with general intelligence.

Later, Cacioppo, Petty, and Kao (1984) created a short-form (18-item) of the Need for Cognition Scale that was strongly correlated ($r = .95$) with the long-form and was reliable ($\theta = .90$). They stated that the short-form was a more efficient assessment instrument than the long-form of the Need for Cognition Scale. Other researchers have supported the short-form of the scale as a valid measure of NFC (e.g., Sadowski, 1993; Tolentino, Curry, & Leak, 1990). Scores on this form of the scale range from 18 to 90.

The Need for Cognition Scale has been used in several persuasion studies. The studies show that individuals who are high in NFC enjoy thinking and are thus more motivated to engage in the effortful scrutiny of persuasive messages. High NFC individuals recall more arguments, generate more thoughts about the issue, and seek information about complex issues more so than low NFC individuals (Perloff, 2003). High NFC individuals tend to scrutinize messages by evaluating the strength of the arguments and are more persuaded by the *quality* of arguments than by peripheral cues like source likeability (Perloff, 2003). The research shows that high NFC individuals are more likely to take the central route to persuasion.

In contrast, low NFC individuals are more likely to take the peripheral route to persuasion. Low NFC individuals try to avoid effortful thought and are less likely to be persuaded by argument strength. Instead, low NFC people are more affected by peripheral cues, such as source attractiveness and likeability (Perloff, 2003). Chaiken (1987) noted

that low NFC individuals engage in less systematic (or central route) processing, and so are not given information that would help them to reject heuristics and simple rules. Thus low NFC individuals are more likely to use, and perhaps even prefer, heuristics.

It must be noted that high NFC individuals can process via the peripheral route and low NFC individuals can process via the central route. For example, an individual may prefer to avoid exerting cognitive effort in general, but when faced with a personally relevant issue, he or she will use the central route to persuasion. Knowing an individual's score on the NFC scale will only tell us about his/her underlying tendency and will not necessarily inform us of his/her current processing *state*.

Overview of the Current Studies

Are biases more likely to affect perceptions of alibis and suspects when perceivers are processing via the peripheral route (vs. the central route)? Two studies attempted to answer this question. Participants heard a police report and a suspect's alibi and completed alibi believability ratings. This dissertation examined the impact of a message variable (the strength of the alibi evidence), source variables (suspect's gender, attractiveness, and prior convictions), a context variable (judge's instructions on prior conviction evidence), and a recipient variable (NFC) on alibi believability and likelihood of suspect guilt ratings (see Figure 2). Other dependent measures were assessments of the suspect's character traits, and ratings of participants' understanding of judicial instructions.

Recipient Variables. In both studies, participants' underlying *tendency* to prefer central or peripheral processing was assessed by administering the short form of the Need for Cognition Scale (Cacioppo et al., 1984).

Message Variable. In both studies, the strength of the evidence in support of the

alibi was manipulated. In the strong condition, the suspect's alibi was supported by difficult-to-fabricate physical evidence (videotape) and by a non-motivated but familiar person (server in café) (Olson & Wells, 2004). In the weak condition, the suspect's alibi was supported by a motivated and familiar person (suspect's brother) and had no supporting physical evidence (Olson & Wells, 2004).

Source Variables. Source characteristics were manipulated in both studies. The suspect's gender (male/female), physical attractiveness (attractive/unattractive), and prior convictions (same crime: robbery vs. different crime: physical assault vs. perjury) were varied.

Context Variables. In Study 2, the impact of judge's instructions (instructions or no instructions) regarding prior conviction evidence on evaluations of suspects and their alibis was examined. The instructions were taken from a Canadian judges' charge manual (Ferguson & Bouck, 2004).

Study 1. For perceivers processing via the peripheral route, do *source* variables bias alibi believability and suspect guilt ratings? In this study the impact of source variables (gender: male vs. female, physical attractiveness: attractive vs. unattractive), a message variable (strength of alibi evidence: strong vs. weak) and a recipient variable (high vs. low NFC) on alibi believability and suspect guilt ratings were examined. Participants viewed photographs of an attractive or unattractive male or female suspect and then heard an interview between two police officers and a suspect (where the alibi information was provided).

In accordance with the ELM, it was hypothesized that perceivers low in NFC would be less likely to scrutinize the alibi evidence and be more persuaded by suspect attractiveness and gender than perceivers high in NFC. In contrast, perceivers high in

NFC would be more persuaded by strong alibi evidence than weak alibi evidence and would be less persuaded by source characteristics (gender and attractiveness). It was also hypothesized that strong alibis would lead to higher believable ratings and lower guilt ratings than weak alibis. More specific hypotheses are described in the results section of Study 1.

Study 2. For low NFC participants, does the knowledge that the suspect has been convicted of a past crime bias perceptions of the alibi and the suspect? What impact do judge's instructions regarding prior convictions have on individuals high vs. low in NFC? Are those high in NFC more likely to adhere to judicial instructions than those low in NFC? This study included a source variable (prior conviction – same crime vs. prior conviction – different crime vs. prior conviction - perjury), a context variable (judge's instructions vs. no instructions), a message variable (strength of alibi evidence – strong vs. weak), and a recipient variable (high vs. low NFC).

Using the ELM, it was hypothesized that perceivers low in NFC would be more swayed by the knowledge of prior convictions (a source variable) than those high in NFC, even when they are given strict instructions regarding the legal use of this evidence. It was hypothesized that individuals high in NFC would be more affected by the strength of the alibi evidence than source characteristics and would be more likely to adhere to judicial instructions. It was also hypothesized that strong alibis would lead to higher believability ratings and lower guilt ratings than weak alibis. More specific hypotheses are described in the results section of Study 2.

Chapter Two: Study 1

Method

Design. This study was a 2 (suspect gender: male vs. female) x 2 (physical attractiveness: attractive vs. unattractive) x 2 (strength of alibi evidence: strong vs. weak) x need for cognition (a continuous variable) between-subjects design. Participants were randomly assigned to all experimental conditions except high vs. low NFC which was determined by their scores on the Need for Cognition Scale (see Table 2 for sample sizes for each experimental condition).

Participants. One hundred and ninety-two participants took part in the study. One hundred and thirty four were women, 57 were men, and 1 did not answer this question. The mean age of participants was 19.23 years ($SD = 2.62$) and they ranged in age from 17 to 39 years. Participants were recruited from the Psychology 100 Research Pool at the University of Victoria and were given 1 bonus credit toward their final course grade.

Materials and Manipulations. All participants viewed a PowerPoint Presentation (see Appendix A) that included slides with written words, audio-recordings and photographs of the suspect. The first five slides described a convenience store robbery in which an individual approached a clerk alone in the store and asked her to lie down on the floor. The robber emptied the cash register and fled. Participants then saw a photograph and were told that this was a suspect in the case who had not yet been cleared in the investigation. The photographs varied in terms of suspect gender (male vs. female) and suspect attractiveness (attractive vs. unattractive) (see Appendix B). The photographs were taken from a website (www.beautycheck.de/english) and they were pilot tested for attractiveness. Sixty-two pilot participants were asked to rate how attractive they found the person in the photograph, on a scale from 0 to 10 (where 0 = not attractive at all, 10 =

very attractive). The attractiveness ratings were submitted to two independent samples *t*-tests (1 for female suspects, 1 for male suspects). The attractive female suspect ($M = 8.45$, $SD = 1.06$) was rated as more attractive than the unattractive female suspect ($M = 3.75$, $SD = 1.81$), $t(29) = -8.78$, $p < .01$. Similarly, the attractive male suspect ($M = 6.25$, $SD = 1.61$) was rated as more attractive than the unattractive male suspect ($M = 3.33$, $SD = 1.95$), $t(29) = -4.55$, $p < .01$.

The next slide was an instruction slide that explained that the participants would soon be hearing an interview between the suspect and two police officers. Participants were told that they would later complete a questionnaire where they would evaluate the suspect and his/her alibi. The last slide of the presentation contained a photograph of the suspect. Participants looked at the photograph while the audio-recorded interview played.

The interviews were recorded with volunteers. Two men played the roles of police officers and the suspect was played by a man and a woman. The female suspect recorded her interview first. The male suspect listened to her version and closely imitated it. The interviews were digitally edited using Microsoft Moviemaker so that all parts of the interview were identical except for suspect gender and the manipulation of alibi strength. In the weak alibi condition, the suspect claimed to have been with his/her brother at an Internet café. In the strong alibi condition, the suspect claimed that the waitress at the café served him/her coffee. In the strong alibi condition, the police officers also reviewed videotaped evidence from the entrance to the café and the suspect pointed out to the officers when he/she appeared on the tv screen (see Appendix C for a transcript of the interview).

The manipulation of alibi evidence was based on Olson and Wells (2004). In Olson and Wells (2004), the alibi with the highest alibi believability ratings was the alibi with

difficult-to-fabricate physical evidence (e.g., surveillance videotape from an ATM) that was corroborated by a non-motivated familiar other (e.g., restaurant server). In this study, the strong alibi evidence condition contained difficult-to-fabricate physical evidence (surveillance video from an Internet café) and was corroborated by a non-motivated familiar other (server at Internet café, see Appendix C). The alibi with the weakest alibi believability ratings in Olson and Wells (2004) was the control condition in which there was neither physical nor person evidence supporting the alibi. The “no evidence of any kind” condition was not used because it provides participants with very little information about the suspect and the manipulations of source characteristics would be transparent. That is, participants would have had no other information *except* the source characteristics to use in their assessments of alibis and suspects.

The condition with the second lowest alibi believability ratings had a suspect with no supporting physical evidence but who claimed to have been with his brother at the time of the crime (Olson & Wells, 2004). This alibi was used as my weak alibi evidence condition for several reasons. First, it provided participants with some supportive alibi information. Second, it did not include any physical evidence at all. Olson and Wells (2004) found that suspects who were able to provide any sort of physical evidence were rated as less likely to be guilty than those who had only people to support their claims. Third, in actual criminal cases, suspects are rarely able to provide adequate physical evidence to support their alibis; person evidence is much more common (Olson & Wells, 2004). Thus, using the no-physical evidence and motivated-other as the weak alibi evidence condition was expected to yield lower alibi believability ratings when compared with the strong alibi evidence condition.

Procedure. Participants were randomly assigned to 1 of 8 between-subjects

experimental conditions. They were tested in groups of up to 26 people in classrooms at the University of Victoria. First, participants signed consent forms. Second, participants watched the PowerPoint presentation where they heard information about the convenience store robbery, saw a photograph of the suspect, and heard the interview between the two police officers and the suspect. Third, the questionnaire (see Appendix D) was distributed and participants completed it individually. The questionnaire contained several dependent variables (alibi believability, suspect guilt, Need for Cognition Scale), a motivation to listen to the alibi manipulation check question, ratings of the suspect's character and additional, exploratory questions (see dependent measures below). Finally, the participants were verbally debriefed as a group.

Dependent Measures. Following the PowerPoint presentation, participants completed the questionnaire (based on Olson & Wells, 2004, see Appendix D). Participants first completed two dependent measures: alibi believability and suspect guilt ratings. For the alibi believability measure, participants were asked to rate how believable the suspect's alibi was on an 11-point Likert-type scale (0 = I do not believe the suspect at all, 10 = I believe the suspect completely). For the suspect guilt ratings, participants rated the likelihood that the suspect is the person who committed the crime on an 11-point scale (0 = very unlikely, 10 = very likely).

Participants then answered a manipulation check question where they indicated how motivated they were to listen to the suspect's alibi (0 = not motivated at all, 10 = very motivated). Participants also rated the suspect on 20 character traits (1 = does not describe this suspect, 10 = describes this suspect, based on Olson & Wells, 2004). Some of the character traits were: suspiciousness, trustworthiness, shrewdness, and honesty. These ratings were included because participants' stereotypes of the suspect may also affect their

character trait ratings. For example, a participant on the peripheral route to persuasion (i.e., low in need for cognition) may see an unattractive suspect as more suspicious or shrewd, and may see an attractive suspect as more honest and trustworthy. Next, participants completed the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984, see Appendix E).

Finally, some additional questions were asked. Participants were asked if they had ever been a juror in a trial. This question was included to explore whether participants have had prior experience evaluating suspects. The accuracy of participants' memories of the crime and alibi (e.g., how much money was stolen?) was also assessed. The five accuracy questions were scored by a trained research assistant (as correct or incorrect). Next, participants completed an exploratory checklist where they indicated how many television crime shows they watch. This question was included solely as a descriptive measure for the purpose of generating ideas for future research and thus will not be discussed further. There were two exploratory, open-ended questions. The first asked participants what the term "alibi" meant to them. This question was included because in future studies I want to explore participants' understanding of the term 'alibi'. The final question asked them if they had anything else to say about the alibi or suspect. Again, this question was included for generating ideas for future research. I will not discuss the results of these two exploratory questions because they were included solely as a means to generate ideas for future research.

Results

All of the results reported below met all univariate or multivariate assumptions.

Need for Cognition. A total score on the Need for Cognition Scale was calculated by summing participants' answers on each question of the Need for Cognition Scale

(mean = 62.74, $SD = 10.65$, minimum = 31, maximum = 84, near-normal distribution). Need for cognition was included as a continuous predictor variable in the analyses that follow (please see Table 3 for means and standard errors for the NFC measure in all conditions).

Manipulation Check of Motivation to Listen to the Alibi. As a manipulation check, participants rated how motivated they were to listen to the alibi. First, NFC was correlated with the motivation to listen measure. Need for cognition ($r = .19, p < .01$) was significantly and positively correlated with motivation. Next, a 2 (suspect gender: male vs. female) x 2 (physical attractiveness: attractive vs. unattractive) x 2 (strength of alibi evidence: strong vs. weak) x NFC Analysis of Variance (ANOVA) was conducted. This test was performed to determine whether, in fact, participants higher in NFC were more motivated to listen to the alibi than participants lower in NFC. The main effect for NFC was significant, $F(1, 176) = 4.31, MSE = 22.93, p < .05, \text{partial } \eta^2 = .02$. Participants higher in NFC were significantly more motivated to listen to the alibi than were participants lower in NFC. The other main effects and interactions were not significant (p 's $> .05$). The overall motivation mean for all participants was 7.06 ($SD = 2.33$).

Alibi Believability. It was hypothesized the female suspects' and physically attractive suspects' alibis would be more believable than the male suspects' and physically unattractive suspects' alibis. It was hypothesized that strong alibis would be more believable than weak alibis (Olson & Wells, 2004). Finally, it was hypothesized that there would be a three-way interaction: for participants lower in NFC, the attractive female's alibi would be most believable, and the unattractive male's alibi would be least believable.

Alibi believability was correlated with need cognition at all levels of the

experimental groups and there were no significant relationships between the two variables (p 's $> .05$). NFC was not included in the following ANOVA. Participants' ratings of alibi believability were assessed via a 2 (suspect gender) x 2 (physical attractiveness) x 2 (strength of alibi evidence) between-subjects ANOVA. Contrary to the hypotheses, suspect gender and attractiveness had no significant main effects on alibi believability (p 's $> .05$). However, as predicted, alibi strength had a significant main effect on alibi believability ratings, $F(1, 184) = 72.00$, $MSE = 263.01$, $p < .01$, partial $\eta^2 = .28$. Strong alibis ($M = 8.21$, $SD = 1.98$) were seen as more believable than weak alibis ($M = 5.88$, $SD = 1.86$). Again, in contrast to the predictions, none of the interactions were significant (p 's $> .05$). Please see Table 4 for a complete list of means and standard deviations for all experimental conditions.

Guilt Ratings. Similar to the alibi believability ratings, it was hypothesized that female suspects and physically attractive suspects would be seen as less guilty than male suspects and physically unattractive suspects because participants would apply the 'what is beautiful is good' stereotype and would see men as the more typical perpetrators of convenience store robberies (Eagly et al., 1991; Greenberg, Westcott, & Bailey, 1998; Petty & Wegener, 1998). It was also hypothesized that suspects with strong alibis would be seen as less likely to be guilty than suspects with weak alibis (Olson & Wells, 2004). Finally, it was hypothesized that there would be a three-way interaction: for participants low in NFC, the attractive female would be rated as least likely to be guilty, and the unattractive male would be rated as most likely to be guilty.

NFC was correlated with guilt ratings at all levels of the categorical IVs and there was one significant correlation. NFC was significantly (and negatively) correlated with

guilt ratings in the attractive, female, and weak alibi condition $r = -.48, p < .05$. All other correlations were nonsignificant (p 's $> .05$). Therefore NFC was not included in the following ANOVA⁴. Participants' ratings of the likelihood that the suspect was the person who committed the crime were subjected to a 2 (suspect gender) x 2 (physical attractiveness) x 2 (strength of alibi evidence) between-subjects ANOVA. In contrast to the hypotheses, suspect gender and attractiveness had no significant effects on guilt ratings (p 's $> .05$). However, in line with the hypotheses, alibi strength had a significant main effect on guilt ratings, $F(1, 184) = 58.85, MSE = 221.09, p < .01, \text{partial } \eta^2 = .24$. Suspects with strong alibis ($M = 1.91, SD = 1.98$) were seen as *less* likely to have committed the crime than suspects with weak alibis ($M = 4.04, SD = 1.92$). In contrast to the hypotheses, none of the interactions were significant (p 's $> .05$). Please see Table 5 for a complete list of means and standard deviations for all experimental conditions.

To explore the relationship between alibi believability and guilt ratings, these two measures were correlated in all experimental groups. Alibi believability was significantly and negatively correlated with guilt ratings in all eight experimental groups (p 's $< .01$).

Character Traits. Olson and Wells' (2004) 20 character trait ratings were included in the questionnaire. It was hypothesized that participants low in NFC would use their stereotypes concerning suspect gender and attractiveness in their ratings. Specifically, it was hypothesized that participants lower in NFC would rate physically attractive and female suspects higher on positive character traits (e.g., friendly) and lower on negative character traits (e.g., calculating). It was hypothesized that these same participants would rate physically unattractive suspects and male suspects high on negative character traits

⁴ Although the statistical tool is referred to as ANOVA, it is really ANCOVA. That is, if NFC is included as a covariate in the design, then the results are identical to those reported here.

and low on positive character traits. In terms of the strength of the alibi, it was hypothesized that suspects with stronger alibis would be rated higher on positive character traits when compared with suspects with weaker alibis (based on Olson & Wells', 2004, results).

Ratings of the suspect's character were compared using a 2 (suspect gender) x 2 (physical attractiveness) x 2 (strength of alibi evidence) x need for cognition between-subjects Multivariate Analysis of Variance (MANOVA). Using Wilk's lambda, there was a significant multivariate main effect of alibi strength, $F(20, 148) = 2.08, p < .01$, partial $\eta^2 = .22$. Also using Wilk's lambda, there was a significant multivariate interaction of suspect gender and suspect attractiveness, $F(20, 148) = 1.96, p < .05$, partial $\eta^2 = .21$. Using Wilk's lambda, there was a significant multivariate interaction of strength of alibi and NFC, $F(20, 148) = 1.93, p < .05$, partial $\eta^2 = .21$. Finally, there was a significant multivariate interaction of suspect attractiveness, suspect gender, and NFC, $F(20, 148) = 2.08, p < .01$, partial $\eta^2 = .22$.

Character Traits: Main Effects. It was hypothesized that attractive suspects and female suspects would be rated highly on positive character traits, especially for those participants lower in NFC. However, there were no significant univariate main effects of suspect attractiveness, suspect gender, or NFC on any of the character trait ratings (p 's > .05).

There were two univariate effects of alibi strength on two character traits. As predicted, suspects with strong alibis were rated highly on positive character traits when compared with suspects with weak alibis. Specifically, suspects with strong alibis ($M = 6.43, SD = 2.11$) were seen as more trustworthy than suspects with weak alibis ($M = 5.06,$

$SD = 2.01$), $F(1, 167) = 16.44$, $MSE = 67.85$, $p < .01$, partial $\eta^2 = .09$. Suspects with strong alibis ($M = 5.40$, $SD = 2.26$) were also seen as more loyal than suspects with weak alibis ($M = 4.72$, $SD = 1.99$), $F(1, 167) = 4.10$, $MSE = 18.81$, $p < .05$, partial $\eta^2 = .02$.

Character Traits: Two-Way Interactions. There were two significant two-way interactions. Confirming the hypotheses regarding suspect gender and attractiveness (i.e., that males and unattractive suspects would be rated highly on negative traits), there was a significant suspect attractiveness by suspect gender interaction on shrewdness ratings, $F(1, 167) = 8.49$, $MSE = 24.50$, $p < .01$, partial $\eta^2 = .05$. Follow-up t-tests using the Bonferroni adjustment for Type I error revealed that unattractive male suspects ($M = 3.55$, $SD = 1.77$) were seen as more shrewd than unattractive female suspects ($M = 2.73$, $SD = 1.57$), $t(91) = 1.77$, $p < .025$. Attractive suspects did not differ on this trait regardless of their gender ($p > .025$).

There was a significant interaction of strength of alibi by NFC on ratings of trustworthiness, $F(1, 167) = 11.44$, $MSE = 47.19$, $p < .01$, partial $\eta^2 = .06$. A follow-up simultaneous regression using the Bonferroni adjustment showed that NFC significantly predicted ratings of trustworthiness in the weak alibi condition, $F(1, 93) = 8.47$, $p < .01$, $R^2 = .08$, adjusted $R^2 = .07$. Confirming expectations that low NFC participants would rate suspects with weak alibis low on positive traits, participants lower (versus higher) in NFC found suspects with weak alibis as less *trustworthy*, $t(93) = 2.91$, $p < .025$, standardized $B = .29$. There was no significant relationship between NFC and trustworthiness ratings for participants who heard that the suspect had a strong alibi ($p > .025$).

All other two-way interactions were not significant (p 's $> .05$).

Character Traits: Three-Way Interactions. There was a significant interaction of alibi strength by suspect gender by suspect attractiveness on deceit ratings, $F(1, 167) = 4.45$, $MSE = 15.06$, $p < .05$, partial $\eta^2 = .03$. Confirming expectations regarding unattractive and male suspects (i.e., that they would be rated highly on negative traits), follow-up t -tests with Bonferroni adjustments revealed that the male suspect with a strong alibi was viewed as more deceitful when he was unattractive ($M = 4.12$, $SD = 2.32$) than when he was attractive ($M = 2.57$, $SD = 1.38$), $t(46) = 2.80$, $p < .016$.

There was a significant interaction of suspect gender by strength of alibi by NFC on friendliness ratings, $F(1, 167) = 4.00$, $MSE = 14.74$, $p < .05$, partial $\eta^2 = .02$. Follow-up regressions using the Bonferroni adjustment showed that NFC significantly predicted friendliness ratings only when the suspect was male and had a weak alibi, $F(1, 47) = 8.08$, $p < .016$, $R^2 = .16$, adjusted $R^2 = .13$. Confirming expectations that low NFC participants would rate male suspects lower on positive traits, participants lower (versus higher) in NFC rated the suspect as less friendly when the suspect was male and had a weak alibi, $t(47) = 2.84$, $p < .016$, standardized $B = .38$. Need for cognition did not significantly predict friendliness ratings when the suspect was female or when the male suspect had a strong alibi.

Alibi strength, suspect gender, and suspect attractiveness significantly interacted on shrewdness ratings ($F(1, 167) = 4.51$, $MSE = 13.03$, $p < .05$, partial $\eta^2 = .03$) and ambitiousness ratings ($F(1, 167) = 4.95$, $MSE = 16.40$, $p < .05$, partial $\eta^2 = .03$). However, follow-up t -tests for the interactions failed to reach significance (p 's $> .016$). Suspect attractiveness, suspect gender and NFC significantly interacted on shrewdness ratings, $F(1, 167) = 7.26$, $MSE = 20.95$, $p < .01$, partial $\eta^2 = .04$. However, follow-up regressions

failed to reach significance (p 's > .016).

All other three-way interactions were not significant (p 's > .05).

Character Traits: Four-Way Interaction. There was a significant four-way interaction of suspect attractiveness by suspect gender by NFC by strength of alibi on deceitfulness ($F(1, 167) = 5.46, MSE = 18.47, p < .05, \text{partial } \eta^2 = .03$), shrewdness, ($F(1, 167) = 4.11, MSE = 11.87, p < .05, \text{partial } \eta^2 = .02$) and ambitiousness ratings ($F(1, 167) = 5.04, MSE = 16.68, p < .05, \text{partial } \eta^2 = .03$). Follow-up regressions using the Bonferroni adjustment failed to reach significance for any of the three dependent measures (all p 's > .00625).

Accuracy. The proportion of correct answers (# correct / total of 5 questions) to five cued and free recall questions concerning the alibi and crime was submitted to a 2 (suspect gender) x 2 (physical attractiveness) x 2 (strength of alibi evidence) x need for cognition between-subjects ANOVA. It was hypothesized that participants low in NFC would be less accurate than participants high in NFC because they would be less likely to carefully scrutinize the crime information. However, contrary to the prediction, there were no significant main effects of NFC or any other independent variable, nor were there significant interactions on accuracy ratings (p 's > .05). Overall, the participants were very accurate regardless of experimental condition or NFC ($M = 86.25\%, SD = 14.12\%$).

Exploratory Closed-Ended Question. Participants were asked if they had ever been a juror in a trial. The vast majority of participants had not been jurors in trials ($n = 190$). Only two participants indicated that they had been jurors thus this variable was not analyzed further.

Discussion

The main finding from this study is that the strength of an alibi is important to alibi believability ratings and guilt ratings. Contrary to expectations, suspect gender and attractiveness did not affect alibi believability and guilt ratings, but were important when it came to assessing the suspect's character. Need for cognition also played less of a role than had been hypothesized. These issues, along with directions for future research are discussed in detail below.

Suspect Gender and Attractiveness. A suspect's gender and physical attractiveness made no difference to participants' ratings of the alibi's believability. That is, being female, or being physically attractive did not make the suspect's alibi seem any more believable. Why might this be? First, from a statistical perspective, it may be that the effects of suspect gender and attractiveness were so small that many more participants would have been needed in order to detect differences between groups. However, I did conduct a power analysis (estimating a small to moderate effect size) before beginning data collection and an appropriate amount of data was collected so this explanation seems unlikely.

A second possibility has to do with the experimental instructions. In this study I did not hide the fact that I was studying people's perceptions of alibis. The study was called the "Alibi" study and participants were told that they would be evaluating a crime suspect on the basis of his/her alibi. When it came time for the participants to evaluate the alibi, they were probably more concerned with the type of evidence supporting the alibi than with the suspect's gender or attractiveness. Participants were motivated to listen to the alibi, and the accuracy results show that they were paying attention to the alibi information. This suggests that the participants, regardless of their underlying level of

NFC, may have shifted into a central route processing state. The strength of the alibi evidence did affect alibi believability ratings (see Strength of Alibi section below) - a finding that is in line with previous studies on alibis (e.g., Olson & Wells, 2004).

The third possible explanation for the null results is that the participants were disregarding suspect attractiveness and gender because they simply do not matter when evaluating an alibi. That is, when one is evaluating an alibi, gender and attractiveness are "irrelevant" suspect characteristics. That is, being of a particular gender or of a particular level of physical attractiveness does not make a person more likely to have committed this particular crime (robbery of a convenience store). Gender and attractiveness probably were not considered as evidence of the suspect's culpability. Indeed, gender and attractiveness stereotypes were not used by participants both low and high in NFC in answering the alibi believability question. However, I would have expected low NFC participants to use their stereotypes more (see section on NFC below).

From a legal standpoint, it is a good thing that suspect attractiveness and gender did not matter here; in a legal setting they should not matter when people evaluate alibis. In the present crime situation, the suspects did not use their attractiveness to commit the crime, and being male or female did not make them any better or worse at committing the crime so the null results do make sense. In addition, the results suggest that being male and being unattractive will not work against criminal suspects. Thus the unattractive male who is wrongfully accused of a crime should not be any worse off because of his level of physical attractiveness or because of his gender.

There were also null effects of attractiveness and gender on guilt ratings ("likelihood that the suspect committed the crime"). The lack of an effect for attractiveness is troubling because there exists solid evidence of the attractiveness-

leniency effect in other studies (e.g., Efran, 1974). The lack of a *gender* effect on guilt ratings is also contrary to the literature. Prior research has shown that when asked to picture a convenience store robber, people are more likely imagine a man as the perpetrator (Greenberg et al., 1998). In addition, female suspects have received less severe sentencing than males (e.g, Forsterlee et al., 2004). This shows that people are more likely to be lenient towards women when it comes to juror decision-making.

There were significant effects of gender and attractiveness on character trait ratings. *Physical attractiveness* "helped" suspects on only one character trait measure: Unattractive male suspects were seen as more deceitful than attractive male suspects (only in the strong alibi condition). Participants may have felt that attractive suspects are less deceitful in general, but this positive view of attractive suspects did not carry over onto guilt and alibi believability ratings. Need for cognition did not interact with attractiveness here, so low NFC participants were no different from high NFC participants in their use of suspect attractiveness (see Need for Cognition section below).

In terms of suspect *gender*, male suspects were rated as deceitful (when he was unattractive) and less friendly (when participants were low in NFC). These results are in line with the previous finding that men are seen as the more typical perpetrators of armed robberies (Greenberg et al., 1998). Participants seemed to apply the male stereotype on some measures of personality traits.

Overall, the results suggest that the "what is beautiful is good" and gender-leniency stereotypes do not apply to alibi judgments. If being physically attractive and female has helped suspects in the past, then why is it not helping here?

It may be that our stereotypes have changed and people simply are not surprised when women and physically attractive individuals are accused of committing crimes.

However, the gender- and attractiveness-leniency effects are relatively robust in the literature. A better answer may be a methodological one. The guilt rating question was the second question in the questionnaire; participants answered it immediately after the alibi believability question. Again, participants knew that it was an alibi study, and they had just answered a question about the alibi. As a result, participants may have drawn on the evidence supporting the alibi (strong vs. weak alibi evidence) rather than the relatively "irrelevant" suspect characteristics of gender and attractiveness. Again, gender and attractiveness did not help the criminal to commit the crime and so may have seemed relatively irrelevant when assessing suspect guilt.

It is possible that the attractiveness- and gender-leniency effects would be found in a future study if the focus on alibis was hidden. One way that the alibi nature of the study could be hidden would be to give participants more evidentiary information. For example, participants could be given information on the DNA evidence, eyewitness evidence, and alibi evidence in the case (Dahl, Lindsay, & Brimacombe, in press). This would give participants more information in addition to the alibi and would make the alibi evidence seem like only one "piece" of the evidentiary pie. This may mean that participants will look beyond the alibi evidence, and stereotypes may have more of an impact.

Another possibility for the null effects was that the type of crime did not evoke attractiveness and gender stereotypes. In this study, the crime was a convenience store robbery. As stated earlier, being female or being attractive did not help the suspect commit the crime. It is possible that if the type of crime was changed then differences in alibi believability and guilt ratings could be found between male and female suspects and between attractive and unattractive suspects. For example, an attractive individual who

used his/her attractiveness to swindle people out of their money would likely be treated more harshly than an individual who did not use his/her attractiveness to commit the crime (Wuensch et al., 1993). In Study 2, the suspect's prior conviction record (i.e., he was convicted of a similar crime to the current charge or not) was manipulated. Unlike suspect gender and attractiveness, having prior experience committing a similar crime has more bearing on the case, and should affect alibi believability.

Another way in which suspect characteristics could affect alibi believability and guilt judgments would be to manipulate suspect age. Participants may not believe, for example, that a senior citizen committed armed robbery and as a result they may treat older suspects with more leniency compared to younger suspects. Rather than manipulating the suspect's *physical* attractiveness, the suspect's moral attractiveness could also be manipulated. A suspect whose alibi activities involve morally questionable acts (e.g., downloading internet pornography) may be viewed as morally questionable in general and thus as more likely to commit criminal offenses (Olson & Wells, 2004).

Alibi Strength. The strength of the suspect's alibi affected alibi believability ratings and suspect guilt ratings. Suspects with videotaped evidence supporting their whereabouts, and whose alibis were supported by a stranger (the server) were perceived as having more believable alibis and were rated as less likely to be guilty. Suspects with no physical evidence to support their alibis and whose brother corroborated the alibi were seen as more likely to be guilty and as having less believable alibis. These findings support Olson and Wells (2004)'s study where they found that strong, believable alibis were those that were supported by difficult-to-fabricate physical evidence (like a videotape) and were supported by non-motivated people (i.e., people who were *not* family or friends of the accused and therefore less likely to lie on his behalf).

The strength of the alibi had an effect on several character trait ratings as well. Suspects with strong alibis were rated highly on two positive character traits: trustworthiness and loyalty. Looking at the interactions of the strength of alibi variable with other independent variables, low NFC participants were more likely to rate suspects as less trustworthy than high NFC participants when the alibi was weak. Similarly, low (versus high) NFC participants were more likely to rate male suspects as less friendly when they had a weak alibi.

These results demonstrate that having a strong alibi not only made the suspects seem more innocent and their alibis seem more believable, but suspects were also seen as better people in general (i.e., more trustworthy). These findings are in line with implicit personality theory (e.g, Eagly et al., 1991). The suspect who had strong evidence supporting his whereabouts at the time of the crime was seen as having other positive traits like trustworthiness, loyalty, and friendliness. Findings of this kind have implications for suspects in court. It would be helpful for a suspect to have a strong alibi because this could lead to positive inferences about his or her character which could only benefit a suspect.

Need for Cognition. One manipulation check question related to NFC and it asked participants if they were motivated to listen to the alibi. High NFC participants were more motivated to listen to the alibi than were low NFC participants. This finding supports the previous literature wherein high NFC individuals are more likely to scrutinize information they are evaluating (Leippe, Eisenstadt, Rauch, & Seib, 2004).

There were no effects of NFC on alibi believability and guilt ratings. It was also hypothesized the low NFC participants would use their attractiveness and gender stereotypes when assessing the suspect's character. There were no *main effects* of NFC on

character trait ratings. However, there were differences (in the predicted direction) between low and high NFC participants in their ratings of suspect trustworthiness and friendliness. Low NFC participants were more likely to rate suspects with weak alibis as less trustworthy and less friendly (in this last instance, only when the suspect was also male).

Does NFC simply not matter when evaluating alibis and suspects? I suspect that it does matter. The reasons for the lack of results may have to do with the methodology and with the sample of participants. The study was obviously an alibi study and thus all participants scrutinized the alibi evidence. As a whole, the participants were quite motivated to listen to the alibi (the overall mean was 7.06 / 10) and were quite accurate in their recall of alibi information. One reason for the high level of motivation (that was discussed earlier) is that the study is called the "Alibi" study and participants were told in the experimental instructions that they would be asked to evaluate the suspect on the basis of his or her alibi. Therefore, participants probably were paying relatively close attention to the alibi, regardless of their underlying level of NFC. Social desirability may be an issue here as well; participants knew that the study was about alibis and therefore they may have wanted to show the experimenter that they really were listening and paying attention to the alibi as instructed. As discussed earlier, in future alibi studies the true nature of the study could be hidden (i.e., that the focus of the study is on the alibi).

Another reason may be that participants classified as lower in NFC (trait) were still quite motivated (state) to scrutinize the crime and suspect information and thus were not relying on their stereotypes. That is, they may have been pushed into a central route processing state, regardless of the underlying level of NFC. Another possibility is that all participants were university students and typically students are higher in NFC than the

general population (and may be approaching the ceiling on NFC scores). For example, the Need for Cognition Scale was created using university professors (high NFC) and factory workers (low NFC) so it makes sense that university *students* would fall into the high NFC group (Cacioppo & Petty, 1982; Cacioppo, Petty, & Kao, 1984). In future studies, the use of a community sample would be beneficial because it would lead to greater variance in NFC scores. As a result, lower NFC participants may use their gender and attractiveness stereotypes even more than the participants in the current sample.

Thus, the use of undergraduates as participants is limiting in that the sample is not representative of the general population. The participants in this study may have been higher in NFC than the general population. Undergraduates may also differ from the general population in terms of general demographic characteristics (e.g., age, income, education level) and this could affect their attitudes towards legal issues (e.g., Aubrey & Ewing, 1989; Konecni, Ebbesen, & Hock, 1996).

The participants acted as "social perceivers" but were asked to perform tasks similar to those of actual jurors. Few participants in this study had been jurors (two in the entire sample). This finding is not surprising given the young age of sample. It is also not surprising because the participants were Canadian. Few Canadian trials are trial-by-jury (www.justice.gc.ca) and so the participants simply did not have many opportunities to serve on juries. The decision to include undergraduates as participants, rather than recruiting members of the general public, was driven in part by practical limitations. The recruitment of potential jury-members from outside the university setting would have been a costly and time-consuming endeavor. Given that I was not studying jury dynamics or deliberation processes per se, but people's perceptions of suspects and their alibis, I view a sample of student participants as acceptable. The decision to use undergraduates is

also completely in line with the methodologies employed in other alibi studies (e.g., Olson & Wells, 2004). However, I recognize though that an appropriate and interesting follow-up study could address differences in perceptions of alibis between undergraduates versus community members.

Another possible avenue for future research would be to use an experimental manipulation where participants could be pushed to a central or peripheral route processing *state*, regardless of their pre-existing level of NFC (*trait*). For example, in Sargent and Bradfield (2004), participants in the central route processing condition (i.e., high motivation) were offered cash rewards if they made the "correct" decision concerning suspect guilt, and they were told that their results would help to inform actual jury instructions. Participants in the peripheral route processing condition (i.e., low motivation) were given the cash as soon as they agreed to participate, and they were told that their participation was part of a pilot project. I did not choose this experimental manipulation because of budgetary limitations and because it is not indicative of the manner in which actual jurors are treated. However, this method would be helpful in that it may tell us whether there are some circumstances in which social perceivers will use gender and attractiveness stereotypes when assessing alibis.

Chapter Three: Study 2

Method

Design. This experiment was a 3 (prior conviction: prior conviction-same crime vs. prior conviction-different crime vs. prior conviction-perjury) x 2 (judge's instructions: present vs. absent) x 2 (strength of alibi evidence: strong vs. weak) x need for cognition between-subjects design (see Table 6 for sample sizes for each experimental condition). Defendant gender was held constant in this study: the defendant was always male. Physical attractiveness was not manipulated here. Participants were randomly assigned to all experimental conditions (prior convictions, judge's instructions, strength of alibi evidence) except need for cognition (which was determined by totaling participants' scores on the Need for Cognition Scale as in Study 1).

Participants. Three-hundred and thirty-nine participants took part in this study. Two hundred and forty-six were women, 91 were men, and 2 did not answer this question. The mean age of participants was 22.27 years ($SD = 7.34$) and they ranged in age from 17 to 65 years. Participants were recruited from introductory and second-year Psychology classes at the University of Victoria, Malaspina University-College, and Kwantlen University-College. Participants in all three universities were given 1 bonus credit in their psychology courses for participating.

Materials. Unlike the first study, in Study 2 participants were asked to take on the role of jurors (see Study 2 experimental instructions in Appendix A). Participants played the role of jurors in this study because they were given judicial instructions regarding the correct legal use of prior conviction evidence (see description below). These instructions are given to jurors in Canada when they have heard evidence of prior convictions. Unlike in Study 1 where participants were asked simply to evaluate suspects on the basis of their

alibis, here participants were asked to consider a defendant in a legal case so that the later judicial instructions manipulation made sense.

The alibi scenarios were similar to Study 1. In Study 2, however, only the male alibi scenario was presented. In addition, defendant physical attractiveness was not manipulated here so participants did not see a photograph of the defendant. The alibi scenario still varied in terms of strength of alibi evidence. What was new in Study 2 was prior conviction evidence (based on Wissler & Saks, 1985). In the prior-conviction same crime condition, the defendant admitted to a prior conviction for robbery. In the prior-conviction different crime condition, the defendant admitted to a prior conviction for physical assault. In the perjury conviction, the defendant admitted to a prior perjury conviction. Time since conviction was held constant: the defendant in all conditions admitted that the prior conviction occurred two years ago (see Appendix C for the transcript of the interview).

Another new addition to Study 2 was the use of judge's instructions (Ferguson & Bouck, 2004) concerning the legal use of prior conviction evidence (see Appendix F). The exact wording from the judge's charge manual was used. Participants heard a "judge" reading the instructions. The judge's role was played by a male Professor. Half of the participants heard the judge's instructions and the remainder did not hear them at all.

Procedure. Participants were randomly assigned to 1 of the 12 between-subjects experimental conditions. They were tested in groups (of up to 26 people) in classrooms at the University of Victoria, Malaspina University-College and Kwantlen University-College. The procedures are similar to those in Study 1, except no defendant photograph was shown, and half of the participants heard judge's instructions (and the other half did not hear any instructions).

Dependent Measures. The same questionnaire used in Study 1 was used again in Study 2. For those participants who heard the judge's instructions, there was an additional questionnaire page. This page contained a question asking participants to rate whether they understood the judge's instructions on a 10-point scale (0 = did not understand at all – 10 = understood perfectly). Participants were then asked to freely recall as many of the judge's instructions as possible (see Appendix D). The free-recall measure was scored for accuracy by a trained research assistant (accuracy = # correct statements / # total statements). To confirm that the accuracy scoring was reliable, inter-rater reliability was calculated by correlating two independent raters' scoring of 17 transcripts (10% of the data set). Transcripts were chosen for inclusion in this analysis through the use of a random numbers table, thus all transcripts were chosen at random. Pearson product-moment correlations were calculated for the raters' coding of the number of correct statements, and for the number of incorrect statements. Inter-rater reliability for the number of correct statements was excellent, $r = .85, p < .01$. Inter-rater reliability for the number of incorrect statements was significant, $r = .65, p < .01$ but was not high. One reason for this may be that both raters found incorrect statements in only 4 of the 17 participants' statements. It is possible that there was a restriction of range in the sample, which hindered the possibility of finding a stronger correlation (Tabachnik & Fidel, 2001).

Results

All of the results reported below met all univariate or multivariate assumptions.

Need for Cognition. A total score on the Need for Cognition Scale was calculated by summing participants' answers on each question of the Need for Cognition Scale (mean = 64.66, $SD = 10.45$, minimum = 26, maximum = 87, near-normal distribution).

Need for cognition was included as a continuous predictor variable in the analyses that follow (see Table 7 for means and standard errors for the NFC measure in all conditions).

Manipulation Check of Motivation to Listen to the Alibi. As a manipulation check, participants rated how motivated they were to listen to the alibi. First, NFC was correlated with the motivation to listen measure. Need for cognition ($r = .19, p < .01$) was significantly and positively correlated with motivation, therefore it was included in the following ANOVA. Next, a 3 (prior conviction: same crime vs. different crime vs. perjury) x 2 (judge's instructions: present vs. absent) x 2 (strength of alibi evidence: strong vs. weak) x need for cognition between-subjects ANOVA was conducted on motivation to listen ratings. This test was performed to determine whether, in fact, participants higher in NFC were more motivated to listen to the alibi than participants lower in NFC. Confirming expectations, the main effect for NFC was significant, $F(1, 315) = 8.40, MSE = 46.58, p < .01, \text{partial } \eta^2 = .03$. Participants higher in NFC were significantly more motivated to listen to the alibi than were participants lower in NFC.

Strength of alibi and judge's instructions significantly interacted on motivation to listen, $F(1, 315) = 4.96, MSE = 27.47, p < .05, \text{partial } \eta^2 = .02$. Follow-up *t*-tests using the Bonferroni adjustment failed to reach significance p 's $< .025$. There was also a significant interaction of strength of alibi by judge's instructions by NFC on motivation ratings, $F(1, 315) = 5.30, MSE = 29.36, p < .05, \text{partial } \eta^2 = .02$. To aid interpretation, separate follow-up regressions were conducted (using the Bonferroni adjustment) with NFC as the predictor and motivation to listen as the dependent variable for each strength of alibi and judge's instructions combination, resulting in a total of four follow-up regression analyses. One regression was significant, and showed that NFC significantly

predicted motivation ratings when the defendant's alibi was strong and the judge's instructions were present, $F(1, 84) = 18.02, p < .016, R^2 = .42, \text{adjusted } R^2 = .17$. Higher (versus lower) NFC participants were motivated when the defendant's alibi was strong and when they heard the judge's instructions regarding prior conviction evidence, $t(84) = 4.25, p < .016, \text{standardized } B = .42$. Need for cognition did not significantly predict motivation when the judge's instructions were absent and when the alibi was weak (p 's $> .016$). The overall motivation mean for all participants was 6.95 ($SD = 2.42$). All other main effects and interactions were not significant (p 's $> .05$).

Alibi Believability. It was hypothesized that a defendant convicted of the same crime (robbery) in the past would lead to lower alibi believability ratings versus the defendant who was convicted of a different crime in the past (physical assault, Wissler & Saks, 1985). It was also hypothesized that strong alibis would be more believable than weak alibis (Olson & Wells, 2004).

Alibi believability was correlated with need cognition at all levels of the categorical IVs and there two significant correlations. NFC and believability were significantly and positively correlated in the strong alibi, robbery, and judge's instructions present condition ($r = .41, p < .05$) and in the strong, perjury, and judge's instructions present condition ($r = .44, p < .05$). All other correlations were not significant (p 's $> .05$). As in Study 1, NFC was not included in the following ANOVA⁵. Participants' ratings of alibi believability were assessed via a 3 (prior conviction) x 2 (judge's instructions) x 2 (strength of alibi evidence) between-subjects ANOVA. As predicted, alibi strength had a significant main effect on alibi believability ratings, $F(1, 327) = 120.34, MSE = 414.97, p$

⁵ Although I refer to the statistical tool as ANOVA, it is really ANCOVA. That is, if NFC is included as a covariate in the design, then the results are identical to those reported here.

< .01, partial $\eta^2 = .27$. Strong alibis ($M = 7.41$, $SD = 1.89$) were seen as more believable than weak alibis ($M = 5.16$, $SD = 1.87$).

There was a significant main effect of type of prior conviction on alibi believability ratings, $F(2, 327) = 3.85$, $MSE = 13.28$, $p < .05$, partial $\eta^2 = .02$, see Figure 3. A follow-up Tukey test showed that defendants who had been previously convicted of physical assault ($M = 6.74$, $SD = 2.27$) had more believable alibis than defendants who were previously convicted of perjury ($M = 6.00$, $SD = 2.16$), $p < .01$. In contrast to the predictions, defendants with prior records of the same crime (i.e., robbery, $M = 6.13$, $SD = 2.08$) were not seen as having less believable alibis when compared with defendants with a prior record for a different crime (physical assault, $p > .05$). There was also a significant main effect of judge's instructions on alibi believability, $F(1, 327) = 7.07$, $MSE = 24.38$, $p < .01$, partial $\eta^2 = .02$. Participants who heard the judge's instructions concerning the legal use of prior conviction evidence ($M = 6.60$, $SD = 1.98$) rated the alibi as more believable than participants who did not hear the instructions ($M = 5.99$, $SD = 2.34$).

None of the interactions were significant (p 's $> .05$). Please see Table 8 for a complete list of means and standard deviations across all experimental conditions.

Guilt Ratings. Participants were asked how likely it was that the defendant committed the current crime (robbery). If participants obey the judicial instructions (see Appendix F), then in the instructions-present condition defendant guilt should be the same whether the defendant was convicted of physical assault (different crime) or robbery (same crime) in the past because prior conviction evidence can only be used to make credibility judgments, not guilt judgments. However, as discussed in the introduction,

previous research has found that participants often fail to use judicial instructions (e.g., Wissler & Saks, 1985). Therefore, it is likely that participants will find the defendant previously convicted of robbery (same crime) as more likely to be guilty than defendants previously convicted of physical assault (different crime).

Guilt ratings for defendants with prior convictions of perjury should be higher than the other two conditions (Wissler & Saks, 1985). If participants obey the judicial instructions, then defendants convicted of perjury in the past should be seen as more likely to be guilty than defendants convicted of physical assault or robbery because a perjury conviction implies that the defendant lied in the past or changed his testimony (Appendix F). This kind of conviction is very relevant to credibility and should be considered when assessing guilt.

It was also hypothesized that participants higher in NFC would be more likely to attend to and follow judicial instructions than participants lower in NFC. Therefore, it was hypothesized that higher (versus lower) NFC participants would rate the defendant previously convicted of perjury as more guilty than the defendant previously convicted of robbery. Finally, it was hypothesized that defendants with strong alibis would have lower guilt ratings when compared with defendants with weak alibis (Olson & Wells, 2004).

NFC was correlated with guilt ratings at all levels of the categorical IVs and, in contrast to the predictions there was no significant relationship between the two variables (p 's > .05). Therefore NFC was not included in the following ANOVA. Participants' ratings of the likelihood that the defendant was the person who committed the crime were subjected to a 3 (prior conviction) x 2 (judge's instructions) x 2 (strength of alibi evidence) between-subjects ANOVA. As predicted, alibi strength had a significant main effect on guilt ratings, $F(1, 327) = 88.45$, $MSE = 310.18$, $p < .01$, partial $\eta^2 = .21$.

Defendants with weak alibis ($M = 4.84$, $SD = 1.74$) were seen as more likely to have committed the crime than defendants with strong alibis ($M = 2.90$, $SD = 2.06$).

Type of prior conviction significantly affected guilt ratings, $F(2, 327) = 5.75$, $MSE = 20.16$, $p < .01$, partial $\eta^2 = .01$, please see Figure 4. Confirming predictions, follow-up Tukey tests revealed that defendants previously convicted of robbery (same crime, $M = 4.23$, $SD = 2.37$) were seen as more likely to be guilty than defendants previously convicted of physical assault (different crime, $M = 3.39$, $SD = 1.84$), $p < .01$. Guilt ratings for defendants convicted of perjury ($M = 3.98$, $SD = 2.11$) did not differ when compared with the robbery and physical assault conditions (p 's $> .05$).

There was one significant interaction. Strength of alibi and prior conviction significantly interacted on guilt ratings, $F(2, 327) = 3.14$, $MSE = 11.01$, $p < .05$, partial $\eta^2 = .02$, see Figure 5. Follow-up t -tests using the Bonferroni adjustment found that defendants with weak alibis were seen as more likely to be guilty than defendants with strong alibis when the defendant was previously convicted of robbery ($t(109) = 7.05$, $p < .01$; $M = 5.59$, $SD = 1.76$; $M = 2.95$, $SD = 2.16$, for weak and strong alibis, respectively), physical assault ($t(111) = 4.68$, $p < .01$; $M = 4.17$, $SD = 1.40$; $M = 2.68$, $SD = 1.92$, for weak and strong alibis, respectively), and perjury ($t(113) = 4.63$, $p < .01$; $M = 4.77$, $SD = 1.76$; $M = 3.09$, $SD = 2.12$, for weak and strong alibis, respectively). Thus, in all three prior conviction conditions, defendants with weak alibis were seen as more likely to be guilty than were defendants with strong alibis.

None of the other interactions were significant (p 's $> .05$). Please see Table 9 for a complete list of means and standard deviations across all experimental conditions.

To explore the relationship between alibi believability and guilt ratings, these two

measures were correlated in all experimental groups. Alibi believability was significantly and negatively correlated with guilt ratings in all twelve experimental groups (p 's < .01).

Character Traits. It was hypothesized that defendants with a previous robbery conviction (same crime) would have higher negative and lower positive character trait ratings than defendants with physical assault (different crime). It was hypothesized that participants lower in NFC would be more likely than high NFC participants to rate defendants highly on negative traits and low on positive traits (because they would be more likely to use their stereotypes), particularly when the defendant was previously convicted of robbery in the past. In terms of the strength of the alibi, it was hypothesized that defendants with strong alibis would be rated higher on positive character traits (and lower on negative traits) when compared with defendants with weak alibis (based on Olson & Wells', 2004, results).

Ratings of the defendant's character were compared using a 3 (prior conviction) x 2 (judge's instructions) x 2 (strength of alibi evidence) x need for cognition between-subjects Multivariate Analysis of Variance (MANOVA). Using Wilk's lambda, there was a significant multivariate main effect of alibi strength, $F(20, 291) = 1.66, p < .05$, partial $\eta^2 = .10$. Also using Wilk's lambda, there was a significant multivariate interaction of alibi strength and NFC, $F(20, 291) = 1.87, p < .05$, partial $\eta^2 = .11$. Alibi strength, prior convictions, and judge's instructions also significantly interacted (using Wilk's lambda), $F(40, 582) = 1.63, p < .05$, partial $\eta^2 = .10$. Finally (using Wilk's lambda), alibi strength, prior conviction, judge's instructions, and NFC significantly interacted on character trait ratings, $F(40, 582) = 1.66, p < .01$, partial $\eta^2 = .10$.

Character Traits: Main Effects. It was hypothesized that defendants with weak

alibis would be rated lower on positive traits and higher on negative traits. Looking at the univariate effects, this hypothesis was confirmed for two character traits. It was found that defendants with weak alibis ($M = 4.52, SD = 1.93$) were rated as more scheming than defendants with strong alibis ($M = 3.91, SD = 1.98$), $F(1, 310) = 4.05, MSE = 14.91, p < .05$, partial $\eta^2 = .01$. Defendants with weak alibis ($M = 4.30, SD = 1.51$) were also rated as less trustworthy than defendants with strong alibis ($M = 4.95, SD = 1.77$), $F(1, 310) = 4.27, MSE = 10.90, p < .05$, partial $\eta^2 = .01$.

It was hypothesized that defendants convicted of the same crime in the past (robbery) would be rated high on negative traits and low on positive traits. There was a significant univariate effect of prior conviction on only one character trait rating: loyalty $F(2, 310) = 3.42, MSE = 10.32, p < .05$, partial $\eta^2 = .02$. However, a follow-up ANOVA with Bonferroni adjustments on loyalty ratings (with prior conviction as the independent variable) failed to reach significance ($p > .05$).

There was a significant main effect of NFC on suspiciousness ratings, $F(1, 310) = 7.77, MSE = 37.55, p < .01$, partial $\eta^2 = .02$. A follow-up regression (to determine the direction of the relationship) found that NFC significantly predicted suspiciousness ratings, $F(1, 337) = 8.43, p < .01, R^2 = .02$, adjusted $R^2 = .02$. Confirming the prediction that lower NFC participants would rate suspects higher on negative traits, participants lower in NFC rated the defendant as more suspicious than participants higher in NFC, $t(337) = -2.90, p < .01$, standardized $B = -.16$. The overall mean for suspiciousness was 4.96 ($SD = 2.27$).

There was no main effect of judge's instructions on any of the character trait ratings (p 's $> .05$).

Character Traits: Two-Way Interactions. There was a significant strength of alibi by prior conviction interaction on two character traits ratings. First, there was a significant interaction on content ratings, $F(2, 310) = 3.80$, $MSE = 16.82$, $p < .05$, partial $\eta^2 = .02$. Follow-up t -tests using the Bonferroni adjustment failed to reach significance (p 's $> .025$). Second, there was a significant interaction on trustworthy ratings, $F(2, 310) = 5.01$, $MSE = 12.79$, $p < .01$, partial $\eta^2 = .03$. Again, follow-up t -tests using the Bonferroni adjustment approached but failed to reach significance (p 's $> .025$).

There was a significant interaction of strength of alibi and NFC on trustworthiness ratings, $F(1, 310) = 6.55$, $MSE = 16.71$, $p < .05$, partial $\eta^2 = .02$. There was also a significant interaction of strength of alibi and NFC on caring ratings, $F(1, 310) = 4.90$, $MSE = 14.45$, $p < .05$, partial $\eta^2 = .02$. However, follow-up regressions failed to reach significance (p 's $> .05$).

All other two-way interactions were not significant (p 's $> .05$).

Character Traits: Three-Way Interactions. There was a significant interaction of alibi strength, prior conviction, and judge's instructions on shrewdness ratings, $F(2, 310) = 7.33$, $MSE = 23.12$, $p < .05$, partial $\eta^2 = .05$. Follow-up ANOVAs with the Bonferroni adjustment and post-hoc Tukey tests showed that when the defendant had a weak alibi and there were no judge's instructions, defendants who had committed perjury in the past ($M = 4.65$, $SD = 2.09$) were seen as more shrewd than defendants who had committed physical assault in the past ($M = 3.26$, $SD = 1.75$, $p < .016$). The mean shrewdness rating for suspects who had previously been convicted of robbery fell in between the perjury and physical assault means ($M = 4.33$, $SD = 1.75$) and was not significantly different from the other two prior conviction conditions.

There was a significant strength of alibi by prior conviction by judge's instructions on content ratings, $F(2, 310) = 3.99$, $MSE = 17.66$, $p < .05$, partial $\eta^2 = .03$. There was also a significant interaction of these three independent variables on intelligence ratings, $F(2, 310) = 4.04$, $MSE = 12.60$, $p < .05$, partial $\eta^2 = .03$. None of the follow-up ANOVAs with the Bonferroni adjustment reached significance (p 's $> .016$).

There was a significant strength of alibi by prior conviction by NFC interaction on content ratings ($F(2, 310) = 4.41$, $MSE = 19.49$, $p < .05$, partial $\eta^2 = .03$) and trustworthy ratings, ($F(2, 310) = 4.73$, $MSE = 12.08$, $p < .01$, partial $\eta^2 = .03$). However, follow-up regressions with the Bonferroni adjustment failed to reach significance (p 's $> .016$).

There was a significant interaction of strength of alibi by judge's instructions by NFC on calculating ratings, $F(1, 310) = 4.22$, $MSE = 16.05$, $p < .05$, partial $\eta^2 = .01$. However, follow-up regressions with the Bonferroni adjustment failed to reach significance (p 's $> .016$).

All other three-way interactions were not significant (p 's $> .05$).

Character Traits: Four-Way Interactions. Strength of alibi, prior conviction, judge's instructions and NFC significantly interacted on content ($F(2, 310) = 3.51$, $MSE = 15.51$, $p < .05$, partial $\eta^2 = .02$), intelligence ($F(2, 310) = 4.27$, $MSE = 13.31$, $p < .05$, partial $\eta^2 = .03$) and shrewdness ($F(2, 310) = 6.72$, $MSE = 21.20$, $p < .01$, partial $\eta^2 = .04$) ratings. Follow-up regressions with the Bonferroni adjustment approached but failed to reach significance (p 's $> .00625$).

Accuracy. As in Study 1, the proportion of correct answers (# correct / total of 5 questions) to cued and free recall questions concerning the alibi and crime was submitted to a 3 (prior conviction) x 2 (judge's instructions) x 2 (strength of alibi evidence) x need

for cognition between-subjects ANOVA. It was hypothesized that participants low in NFC would be less accurate than participants high in NFC because they would be less likely to carefully scrutinize the crime information. As in Study 1, however, there were no significant main effects of NFC or any other independent variable, nor were there significant interactions on accuracy (p 's > .05). Overall, the participants were very accurate regardless of experimental condition ($M = 85.07$, $SD = 15.70$).

Understanding of Judge's Instructions. In the "judge's instructions present condition" participants were asked how well they understood the judge's instructions concerning the legal use of prior conviction evidence. It was hypothesized that participants lower in NFC would indicate that they understood the instructions less well because they would be less likely to attend to and remember the judge's instructions than would participants higher in NFC.

NFC was first correlated with the "understanding of instructions" measure, and the two were significantly and positively correlated, $r = .29$, $p < .01$, therefore it was included NFC in the following analysis. The "understanding of instructions" measure was submitted to a 3 (prior conviction) x 2 (strength of alibi evidence) x need for cognition between-subjects ANOVA. There was a significant main effect of NFC, $F(1, 155) = 12.73$, $MSE = 56.71$, $p < .01$, partial $\eta^2 = .08$. Participants higher in NFC indicated that they understood the judge's instructions better than participants lower in NFC. The overall mean for "understanding of instructions" was 7.22 ($SD = 2.17$). All other main effects and interactions were not significant (p 's > .05).

Memory for Judge's Instructions. Participants were asked to write down everything they could remember from the judge's instructions. A trained research assistant then

scored the answers for accuracy. An accuracy variable ("accuracy of recall") was created (# correct / total number of statements). It was hypothesized that participants lower in NFC would be less accurate in their recall of judicial instructions because they would be less likely to attend to and remember the judge's instructions.

First, the accuracy of recall measure was correlated with NFC. Need for cognition and "accuracy of recall" were significantly and positively correlated, $r = .22, p < .01$, therefore NFC was included in the following analysis. The "accuracy of recall" measure was submitted to a 3 (prior conviction) x 2 (strength of alibi evidence) x need for cognition between-subjects ANOVA. There was a significant main effect of NFC on "accuracy of recall", $F(1, 155) = 7.36, MSE = 56.71, p < .01$, partial $\eta^2 = .05$. Participants higher in NFC were more accurate in their recall of judge's instructions than were participants lower in NFC. The overall accuracy of recall mean was 82.52% ($SD = 32.49$).

Exploratory Closed-Ended Question. Participants were asked if they had ever been a juror in a trial. As in Study 1, the vast majority of participants had not been jurors in trials ($n = 337$, or 99.4%). Only two participants (or .6%) indicated that they had been jurors thus this variable was not analyzed further.

Discussion

As in Study 1, Study 2 showed that alibi strength is important to alibi believability and guilt ratings. In Study 1, defendant gender and attractiveness did not affect believability or guilt ratings, but in Study 2 significant effects were found for another source characteristic: prior conviction evidence. That is, participants took the defendant's prior record into consideration when evaluating him and his alibi. Judge's instructions did not affect guilt ratings, which suggests that participants did not use the prior conviction

evidence as they had been instructed. Finally, NFC did not affect believability and guilt, but it did affect participants' understanding of judicial instructions and their recall of those instructions. Specifically, high NFC participants felt that they understood the instructions and in fact were more accurate in their recall of those instructions. The following sections will address the findings of Study 2 in more detail and suggest future directions for research.

Strength of Alibi. The results of Study 2 confirm those of Study 1: strong alibis led to higher believability and lower guilt ratings than weak alibis. This finding is in line with previous studies of alibi strength (Olson & Wells, 2004). As a whole, the two studies suggest that alibi strength consistently influences believability and guilt ratings. Clearly, it is to the defendant's benefit to have a strong alibi that is supported by difficult-to-fabricate physical evidence (Olson & Wells, 2004). Having a strong alibi also led participants to rate the defendant as less scheming, less shrewd, and more trustworthy.

Having a weak alibi worked against the defendant. Defendants with weak alibis were perceived as having less believable alibis, as more likely to be guilty, and as more scheming, more shrewd and less trustworthy. Why did having a weak alibi lead to adverse views of the defendant's character? As with Study 1, implicit personality theory (e.g., Eagly et al., 1991) may play a role in Study 2. Possessing a poorly supported alibi may cause participants to rate the alibi as less believable and assume that the defendant was guilty. These negative inferences generalized to the defendant's character; not only was the defendant probably guilty, but he also possessed negative character traits in general.

Alibi believability ratings even in the strong evidence condition were not at ceiling (mean = 7.41, highest possible score would be 10). Why are alibi believability scores well below ceiling? Olson and Wells (2004) suggested that participants may be

skeptical of alibis in general. They also suggested that people who are asked to provide alibis by the police are seen as suspicious. That is, if the police are asking someone for an alibi, then this is a form of accusation.

Need for Cognition. There was no effect of NFC on alibi believability and guilt ratings. It was hypothesized that low NFC participants would be most swayed by prior conviction evidence, but the results did not confirm the prediction. As in Study 1, participants higher in NFC rated themselves as more motivated to listen to the alibi. However, this did not translate into different ratings of guilt and believability for low versus high NFC participants. It may be that even though participants reported differences in motivation, all participants in fact listened and attended to the alibi evidence. As suggested in Study 1's discussion, the true nature of the experiment was not hidden; participants knew that they were taking part in an alibi study and they knew that they would be asked to evaluate the defendant on the basis of his alibi. Participants, regardless of their underlying level of NFC, likely paid attention to the strength of the defendant's alibi because they knew the alibi nature of the study. In future studies, experimenters should de-emphasize the importance of alibis in the experimental instructions and as a result more NFC differences could emerge.

There was one effect for NFC on character trait ratings: low NFC (versus high) participants rated the defendant as more suspicious. It is surprising that that NFC did not affect more character trait ratings because it was hypothesized that low NFC participants in particular would be affected by prior conviction evidence and that this in turn would affect character trait ratings. As suggested in Study 1, in future studies participants could come from a community sample. This may lead to larger variation in NFC scores; as a result, low NFC participants may make more negative character inferences when the

defendant was convicted of a similar crime in the past.

Need for cognition led to interesting results when it came to the understanding and memory of judicial instructions. Participants higher in NFC felt they understood the instructions better than lower NFC participants. Indeed, higher NFC participants were more accurate in their recall of instructions. This shows that potential jury members differ in their motivation to listen to evidence (motivation measure), and in their understanding and memory of judicial instructions. To promote fair and accurate trials, one would hope that all jury members would be motivated to scrutinize evidence, and able to understand and recall instructions.

Although there were differences in NFC on understanding and memory of instructions, one cannot make large inferences on how these individual differences will affect processing in the courtroom. First, all participants, regardless of NFC, were quite accurate in their memory of instructions (mean was 82.52%). Second, there were no NFC effects on guilt ratings. This shows that high NFC participants did not use their knowledge of the instructions any differently than low NFC participants when it came time to judge defendant guilt. What these results do suggest is that high NFC individuals pay attention to instructions, remember instructions well, and monitor their memories more so than low NFC individuals.

Prior Convictions. Prior conviction evidence was not manipulated in Study 1. It was included in Study 2 because it was hypothesized that a defendant's prior record would affect the believability of his alibi and guilt ratings. Indeed, prior conviction evidence affected both alibi believability and defendant guilt. Thus, stereotypes about a defendant's propensity to commit crimes (based on his previous acts of criminality) were evident in this study.

Factors unrelated to the alibi itself affected the alibi's believability. Defendants who had been previously convicted of perjury were seen as having less believable alibis than defendants who were previously convicted of physical assault. This finding makes sense because perjury implies that the defendant is not credible: he either lied or made contradictory statements in court and as a result his alibi was seen as less believable. Defendants convicted of perjury in the past were also seen as more shrewd than defendants convicted of physical assault. Therefore, a defendant who has perjured himself in the past may be less believable in general and this in turn may lead to negative character inferences. This finding is in line with previous studies that have found that prior conviction evidence led to more negative sentiments towards the defendant (Clary & Shaffer, 1985).

Whether the defendant was convicted of robbery in the past (same crime as the current charge) did not affect *believability* ratings. It was hypothesized that defendants convicted of the same crime in the past would have lower alibi believability and higher guilt ratings when compared with defendants convicted of a different crime in the past (i.e., physical assault). With *guilt* ratings, this hypothesis was supported. Defendants convicted of robbery in the past led to higher guilt ratings than defendants convicted of physical assault. Participants likely made the inference that if the defendant had committed the same crime in the past, then he likely committed the crime again. Indeed, previous studies have found that prior convictions for similar (vs. dissimilar) crimes led to higher conviction rates (Wissler & Saks, 1985).

It is interesting that there was no interaction of prior conviction evidence with judicial instructions. It was hypothesized that when participants heard judicial instructions regarding the use of prior conviction evidence, guilt ratings would be similar in the

robbery and physical assault conditions. The judicial instructions clearly state that prior convictions do not imply that the defendant is more likely to have committed the current charge; prior conviction evidence can only be used for credibility purposes, not for implying guilt. The results confirm the notion that participants remember judicial instructions but have difficulty in using them appropriately.

Judicial Instructions. As a whole, the judicial instructions results on alibi believability are not clear. Participants who heard the instructions rated the alibi as more believable than participants who did not hear the instructions. The judicial instructions concerned prior conviction evidence and its use in determining guilt. It is not clear why hearing this information caused participants to believe the alibi more.

As stated in the previous section, participants remembered the instructions quite accurately but did not use their knowledge when judging defendant guilt. Although participants did a good job of remembering the instructions is in contrast to some studies. Some researchers have found that participants have poor memories for judicial instructions (Goodman & Greene, 1989). Why were the participants so accurate? It may be that the participants were simply more motivated than the participants in the previous studies. The instructions in the current study were also different from those used in Goodman and Greene (1989); Canadian judicial instructions were used here and Goodman and Greene (1989) used Washington State judicial instructions. The instructions used in the current study focused on prior conviction evidence and its use, while the Washington State instructions also included information on intent (to commit the crime), burden of proof, presumption of innocence, and reasonable doubt. Thus participants in Goodman and Greene (1998) had more information to remember. Thus it makes sense that the participants in the current study were quite accurate in comparison.

The results do support the findings from other studies that found that instructions have little effect on guilt determination (Wissler & Saks, 1985). The participants remembered the judicial instructions, but they were unable to apply them. These results show that people have difficulty working with the information contained in the instructions. In the prior conviction instructions, jurors are asked to use the prior conviction evidence when making *credibility* or *believability* assessments, not *guilt* judgments. That is, jurors were told that a previous conviction does not mean that the person is any more likely to have committed the current charge (guilt), but the previous conviction may speak to the defendant's believability (credibility). The distinction between credibility and guilt may be difficult for jurors to understand.

The purpose of judicial instructions like these is to reduce juror error and improve juror understanding of legal rules (Ferguson, & Bouck, 2004). The authors of the jury charge manual note that their instructions do not have to be adopted and read verbatim by trial judges, but should be tailored for particular cases (Ferguson, & Bouck, 2004). However, they also caution that their research has suggested that many appeals for new trials are won because of errors contained in the jury charge. Thus the legal system is very concerned that jury charges are precisely worded (so that appeals are not possible). It is possible that this focus on careful legal wording can be detrimental to juror understanding of the charge. Social science research could address this problem. Judges, lawyers, and psychologists could work together to create charges that meet legal demands and are also understandable to lay people. Testing participants' use of jury charges can help to inform legal professionals of the effectiveness of their instructions. Appeals may come about because of errors in the wording of jury charges, but the current research suggests that these errors may not matter to the jury because they are not using the instructions anyway.

Chapter Four: General Discussion

The ELM was used to guide the choice of independent variables in this dissertation. Source (or suspect) characteristics and recipient characteristics vary naturally in the population and the legal system has little control over them (Wells, 1978). This dissertation also expanded on the investigation of perceptions of alibi evidence (a message variable) by building on Olson and Wells' (2004) methodology. Finally, this dissertation also included a context variable that is within the legal system's control: judicial instructions (Wells, 1978).

How does this dissertation add to the existing literature? In terms of message variables, the studies confirm the robust and consistent finding of alibi strength's impact on alibi believability and guilt ratings. Physical and person evidence that support an alibi have important implications for the way that suspects/defendants are viewed and treated by potential jurors.

What about source characteristics? Suspect gender and attractiveness did not matter when it came time to judge the alibi's believability and the suspect's guilt. It may be that this result is an artifact of the experimental methodology or it may be due to the fact that a suspect's gender and attractiveness do not matter when it comes to judging alibis and guilt ratings. That is, "what is beautiful is good" may not matter when it comes to alibis and the guilt ratings of suspects who provide alibis.

The manipulation of another source characteristic, prior conviction evidence, did matter when it came to believability and guilt judgments. Judges carefully instruct jurors on the correct use of this kind of evidence; however Study 2 showed that participants were not able to use the instructions appropriately. Legal scholars may believe that the use of instructions helps to protect defendants from prejudice, but the results show that

instructions cannot negate the effect of prior conviction evidence. Being previously convicted of a crime works against defendants, even if judicial instructions are present. This implies that an individual who has been convicted of crimes in the past has a strike against him/her; innocent people may be seen as guilty for crimes they did not commit because of their criminal activities in the past.

It is important to further study judicial instructions because the legal system has control over the content of the instructions and the manner in which they are delivered to jurors. Wells (1978) would say that judicial instructions are a system variable. Social science research can help to make policy changes so that instructions are understandable and useable. The goal of jury charges should be that they are legally accurate *and*, more importantly, useable. If jurors remember the instructions but cannot apply them, then legal professionals should work on creating new, useable instructions.

Another important contribution of the dissertation is that recipient characteristics, specifically need for cognition, can influence social perceivers' perceptions of suspects and defendants. As the ELM literature indicates, people vary in their propensity to scrutinize information. This dissertation shows that NFC affected perceptions of the suspect's character, memory for instructions and participants' motivation to listen to the alibi. Thus participants varied to some degree in their use of stereotypes. Although there were no significant effects of NFC on alibi believability and guilt judgments, it is possible that NFC may matter more in certain situations. For example, in the general population larger variation in NFC exists, therefore it is likely that the average jury will be composed of individuals of varying levels of NFC. Similarly, it is possible that a jury member who is distracted or tired or stressed may not pay close attention during a trial. In the real world some jury members may use their stereotypes and this could impact the fairness of

a defendant's trial.

Directions for Future Research

What questions remain for alibi researchers? Alibi research to date has focused on estimator variables - those variables that are not under the control of the legal system (Wells, 1979). Work should continue on estimator variables. For example, how do characteristics of the victim, the type of crime, the suspect's age or moral attractiveness, the salaciousness of the alibi witness, and participants' need for cognition affect judgments of alibis? Another important avenue for future research is system variable research. System variables are those variables that are or could be under the control of the legal system (Wells, 1979). The way in which judges instruct jurors regarding false alibis, the timing of alibi disclosure, and the moral character of alibi witnesses can have an impact on alibi believability and ratings of suspect guilt. Specific ideas for future research are addressed below.

Estimator Variables. Who evaluates the alibis? Alibi researchers have studied university students' perceptions of alibis (e.g., Culhane & Hosch, 2004; Olson & Wells, 2004). University students may be more likely to process information via the central route (and may have higher NFC scores). However, community-based populations may be more likely to engage in peripheral route processing (and have lower NFC scores) and thus may be more likely to use stereotypes (Petty & Wegener, 1998). Future studies should include community-based samples. If, for example, community participants are lower in their NFC scores, then it is possible that factors like suspect gender and attractiveness may affect their ratings of a suspect's alibi and judgments of the suspect's guilt.

Another way in which alibi researchers could study peripheral route processing

would be to embed their alibi evidence into a larger police report so that participants are not aware of the true nature of the experiment (i.e., to study alibis). This way, individuals lower in NFC may fail to scrutinize the alibi information as carefully as individuals higher in NFC.

Another avenue of investigation is the impact of source characteristics on alibi believability and guilt ratings. Given the strong effects of suspect gender and attractiveness in other studies, changes to the methodology could also lead to significant results for these variables. For example, if the suspect used his/her attractiveness to commit the crime, then participants may rate suspects who are attractive as *more* likely to be guilty than suspects who are not attractive (Wuensch et al., 1993). As mentioned in Study 1's discussion, suspect age could be manipulated so that the crime either fits with the age of the suspect (i.e., this is a crime that a person of this age might commit) or does not (i.e., this is a crime that I cannot imagine a person of this age committing). Another source characteristic that may be relevant is the moral attractiveness of the suspect. The salaciousness of the suspect's alibi activities may work against the defendant. Implicit personality theory suggests that in this case participant-jurors may make the inference that a morally questionable person is more likely to commit criminal acts than a morally sound individual (e.g., G. R. Adams, 1982; Eagly et al., 1991).

Who is corroborating the alibi? Another issue to consider in the alibi context is the impact of salacious alibi witnesses on alibi believability. A morally disreputable alibi witness may lead to the inference that the suspect is also morally disreputable (and therefore the alibi may be less believable). In addition, a salacious alibi witness might be seen as a weaker form of person evidence (Olson & Wells, 2004). Is it better or worse to have a salacious alibi witness than no alibi witness at all?

System Variables. It is important to continue the study of system variables in the alibi context. The finding that participants were unable to use judicial instructions regarding prior conviction evidence also warrants further research. What changes can be made to instructions so that they are useable? Will shorter instructions with simpler word choice be beneficial? Are jurors limited because they lack the legal training that judges possess?

What impact do other kinds of instructions have on jurors? There are several judicial instructions that are relevant to alibi research. If a defendant claims to have been at a brothel at the time of the crime, then his/her alibi witnesses will be individuals who were at the brothel at the same time (Gooderson, 1977). Gooderson (1977) suggested that if the defense chooses to put this type of alibi forward, then the jury should be instructed that an innocent person cannot choose his/her alibi witnesses. That is, juries can be instructed not to make an adverse inference if the defendant has morally questionable individuals as alibi witnesses.

Another issue that can arise at trial is that an alibi may be proven false. A false alibi does not imply guilt, because an innocent individual may have made a mistake, lied about his/her whereabouts to cover up other activities (e.g., other illegal acts), or lied because she/he was scared or confused (Gooderson, 1977). Again, Gooderson (1977) suggested that reminding the jury that a false alibi does not prove that the person committed the crime will help to reduce prejudice towards the defendant.

Instructions about alibi evidence can also be used regarding the timing of the alibi's disclosure. In some jurisdictions, defendants must disclose their alibis to the prosecution immediately (so that the prosecution can investigate the alibi evidence) (Connelly, 1983). In other jurisdictions, defendants can choose to remain silent until

closer to trial. Defendants may choose to remain silent as a protection against self-incrimination (because they are guilty of the crime), because they do not remember where they were at the time of the crime, or because they remember where they were but are innocent of the crime. Connelly (1983) noted that jurors should be instructed that a guilty inference cannot be made if the suspect chose not to disclose the alibi during the police investigation but waited until closer to trial. Researchers can address whether judicial instructions on the moral character of the alibi witnesses (Gooderson, 1977), the falseness of the alibi (Gooderson, 1977), and the timing of the alibi disclosure negate negative views of the defendant.

In sum, this dissertation shows that alibis are not necessarily believed at face value. The strength of the evidence supporting an alibi is an important factor when it comes to its believability. Biases concerning suspect gender and attractiveness did not matter, but a defendant's prior record did matter. This dissertation paves the way for further research on the impact of judicial instructions. Participants in the current research remembered the content of the judge's instructions on prior conviction evidence but did not use this information when rating the defendant's guilt. Are participants able to use the information contained in other kinds of judicial instructions? Do judicial instructions fail to protect the defendant from prejudicial information?

Finally, more research is needed on jurors' level of information processing (e.g., central vs. peripheral processing routes). Situational factors exist that can push people into central or peripheral route processing states and this in turn can affect their processing of information. For example, Sargent and Bradfield (2004) discussed the fact that sometimes jurors are simply not motivated (e.g., fall asleep) or are unable to process information during trial (e.g., during highly technical testimony). Future research may

illuminate the antecedents and consequences of peripheral route processing in the courtroom. Research on alibi believability should consider the effects of peripheral route processing because it may have far-reaching effects. If jurors process via the peripheral route, are confronted by a defendant with a weak alibi, and fail to carefully weigh the evidence before them, then is it possible that an innocent person could be wrongfully convicted? The conviction of the wrongfully accused is a blight on the justice system and legal researchers need to continue to study its causes.

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Table 1

The Elaboration Likelihood Continuum

	Peripheral Route to Persuasion Low Need for Cognition	Central Route to Persuasion High Need for Cognition
Motivation to process	Less	More
Effortful evaluation of message	No	Yes
Reasoned thinking	Less	More
Impact of peripheral cues (source attractiveness, gender, prior convictions)	More	Less
Impact of message strength (strength of the alibi)	Less	More

Table 2

Study 1's Sample Sizes for Each Experimental Condition

	Strong Alibi		Weak Alibi	
	Male Suspect	Female Suspect	Male Suspect	Female Suspect
Attractive Suspect	23	25	26	24
Unattractive Suspect	25	24	23	22

Table 3

Need for Cognition Means and Standard Errors Across Study 1's Experimental Conditions

Suspect Attractiveness	Suspect Gender	Strength of Alibi	Mean	Standard Error	n
Unattractive	Male	Weak	61.48	2.27	23
		Strong	57.92	2.45	25
		Total	59.63	1.68	48
	Female	Weak	59.64	2.18	22
		Strong	65.00	1.84	24
		Total	62.43	1.46	46
Total	Total	Weak	60.58	1.56	45
		Strong	61.39	1.61	49
		Total	61.00	1.11	94
Attractive	Male	Weak	63.65	2.37	26
		Strong	65.61	2.01	23
		Total	64.57	1.56	49
	Female	Weak	65.29	1.91	24
		Strong	63.24	1.99	25
		Total	64.24	1.37	49
Total	Total	Weak	64.44	1.53	50
		Strong	64.38	1.41	48
		Total	64.41	1.04	98

Total	Male	Weak	62.63	1.64	49
		Strong	61.60	1.68	48
		Total	62.12	1.17	97
	Female	Weak	62.59	1.49	46
		Strong	64.10	1.35	49
		Total	63.37	1.00	95
	Total	Weak	62.61	1.10	95
		Strong	62.87	1.08	97
		Total	62.74	.77	192

Table 4

Alibi Believability Means and Standard Deviations Across Study 1's Experimental Conditions

Suspect Attractiveness	Suspect Gender	Strength of Alibi	Mean	Standard Deviation	n
Unattractive	Male	Weak	5.61	1.83	23
		Strong	7.44	2.57	25
		Total	6.56	2.40	48
	Female	Weak	5.68	1.94	22
		Strong	8.69	1.32	24
		Total	7.25	2.22	46
	Total	Weak	5.64	1.86	45
		Strong	8.05	2.13	49
		Total	6.90	2.33	94
Attractive	Male	Weak	6.15	1.67	26
		Strong	8.17	2.06	23
		Total	7.10	2.10	49
	Female	Weak	6.04	2.07	24
		Strong	8.56	1.58	25
		Total	7.33	2.22	49
	Total	Weak	6.10	1.85	50
		Strong	8.38	1.82	48
		Total	7.21	2.16	98

Total	Male	Weak	5.90	1.75	49
		Strong	7.79	2.34	48
		Total	6.84	2.26	97
	Female	Weak	5.87	2.00	46
		Strong	8.62	1.45	49
		Total	7.29	2.21	95
	Total	Weak	5.88^a	1.86	95
		Strong	8.21^a	1.98	97
		Total	7.06	2.24	192

Note. ^a indicates that the means were significantly different at $p < .01$.

Table 5

Guilt Ratings Means and Standard Deviations Across Study 1's Experimental Conditions

Suspect	Suspect	Strength of	Mean	Standard	n
Attractiveness	Gender	Alibi		Deviation	
Unattractive	Male	Weak	4.13	1.74	23
		Strong	2.84	2.56	25
		Total	3.46	2.28	48
	Female	Weak	4.27	1.80	22
		Strong	1.58	1.61	24
		Total	2.87	2.17	46
	Total	Weak	4.20	1.75	45
		Strong	2.22	2.22	49
		Total	3.17	2.23	94
Attractive	Male	Weak	4.00	1.90	26
		Strong	1.70	1.64	23
		Total	2.92	2.11	49
	Female	Weak	3.79	2.26	24
		Strong	1.48	1.73	25
		Total	2.61	2.31	49
	Total	Weak	3.90	2.06	50
		Strong	1.58	1.67	48
		Total	2.77	2.21	98
Total	Male	Weak	4.06	1.81	49

	Strong	2.29	2.22	48
	Total	3.19	2.20	97
<hr/>				
Female	Weak	4.02	2.05	46
	Strong	1.53	1.66	49
	Total	2.74	2.23	95
<hr/>				
Total	Weak	4.04^a	1.92	95
	Strong	1.91^a	1.98	97
	Total	2.96	2.22	192
<hr/>				

Note. ^a indicates that the means were significantly different at $p < .01$.

Table 6

Study 2's Sample Sizes for Each Experimental Condition

	Strong Alibi Evidence		Weak Alibi Evidence	
	Judge's Instructions Present	Judge's Instructions Absent	Judge's Instructions Present	Judge's Instructions Absent
Prior Conviction Same Crime (Robbery)	27	30	27	27
Prior Conviction Different Crime (Physical Assault)	32	27	27	27
Prior Conviction Perjury	27	27	27	34

Table 7

*Need for Cognition Means and Standard Errors Across Study 2's Experimental**Conditions*

Alibi Strength	Prior Conviction	Judge's Instructions	Mean	Standard Error	n
Weak	Physical Assault	Absent	61.33	1.49	27
		Present	63.89	2.20	27
		Total	62.61	1.33	54
	Robbery	Absent	63.52	1.98	27
		Present	66.59	2.17	27
		Total	65.06	1.47	54
	Perjury	Absent	67.29	1.75	34
		Present	68.78	1.66	27
		Total	67.95	1.21	61
Total	Absent	64.31	1.04	88	
	Present	66.42	1.18	81	
	Total	65.32	.78	169	
Strong	Physical Assault	Absent	64.00	2.16	27
		Present	66.50	1.81	32
		Total	65.36	1.39	59
	Robbery	Absent	62.07	1.70	30
		Present	63.30	2.32	27
		Total	62.65	1.41	57

	Perjury	Absent	66.89	1.63	27
		Present	61.00	2.35	27
		Total	63.94	1.47	54
	Total	Absent	64.24	1.07	84
		Present	63.77	1.25	86
		Total	64.00	.82	170
Total	Physical Assault	Absent	62.67	1.31	54
		Present	65.31	1.40	59
		Total	64.04	.97	113
	Robbery	Absent	62.75	1.29	57
		Present	64.94	1.59	54
		Total	63.82	1.02	111
	Perjury	Absent	67.11	1.20	61
		Present	64.89	1.52	54
		Total	66.07	.96	115
	Total	Absent	64.27	.74	172
		Present	65.05	.86	167
		Total	64.66	.57	339

Table 8

*Alibi Believability Means and Standard Deviations Across Study 2's Experimental**Conditions*

Alibi Strength	Prior Conviction	Judge's Instructions	Mean	Standard Deviation	n
Weak	Physical Assault	Absent	4.96	2.10	27
		Present	5.96	1.72	27
		Total	5.46	1.97	54
	Robbery	Absent	4.59	1.78	27
		Present	5.33	1.62	27
		Total	4.96	1.73	54
	Perjury	Absent	4.85	1.96	34
		Present	5.33	1.82	27
		Total	5.07	1.90	61
Total	Absent	4.81	1.93	88	
	Present	5.54	1.73	81	
	Total	5.16^a	1.87	169	
Strong	Physical Assault	Absent	7.67	2.15	27
		Present	8.13	1.62	32
		Total	7.92	1.88	59
	Robbery	Absent	7.27	1.68	30
		Present	7.19	1.88	27
		Total	7.23	1.76	57

	Perjury	Absent	6.74	2.38	27
		Present	7.37	1.39	27
		Total	7.06	1.96	54
	Total	Absent	7.23	2.08	84
		Present	7.59	1.68	86
		Total	7.41^a	1.89	170
Total	Physical Assault	Absent	6.31	2.51	54
		Present	7.14	1.98	59
		Total	6.74^b	2.27	113
	Robbery	Absent	6.00	2.18	57
		Present	6.26	1.97	54
		Total	6.13	2.08	111
	Perjury	Absent	5.69	2.33	61
		Present	6.35	1.90	54
		Total	6.00^b	2.16	115
	Total	Absent	5.99^c	2.34	172
		Present	6.60^c	1.98	167
		Total	6.29	2.19	339

Note. ^{a, b, c} indicate the means are significantly different from one another at $p < .01$.

Table 9

Guilt Ratings Means and Standard Deviations Across Study 2's Experimental Conditions

Alibi Strength	Conviction	Judge's Instructions	Mean	Standard Deviation	n
Weak	Physical Assault	Absent	4.22	1.31	27
		Present	4.11	1.50	27
		Total	4.17^d	1.40	54
	Robbery	Absent	5.96	1.87	27
		Present	5.22	1.60	27
		Total	5.59^c	1.76	54
	Perjury	Absent	5.09	1.99	34
		Present	4.37	1.36	27
		Total	4.77^c	1.76	61
	Total	Absent	5.09	1.88	88
		Present	4.57	1.55	81
		Total	4.84^a	1.74	169
Strong	Physical Assault	Absent	2.78	1.97	27
		Present	2.59	1.90	32
		Total	2.68^d	1.92	59
	Robbery	Absent	2.83	2.10	30
		Present	3.07	2.25	27
		Total	2.95^c	2.16	57

	Perjury	Absent	2.81	2.00	27
		Present	3.37	2.24	27
		Total	3.09^c	2.12	54
	Total	Absent	2.81	2.00	84
		Present	2.99	2.12	86
		Total	2.90^a	2.06	170
Total	Physical Assault	Absent	3.50	1.81	54
		Present	3.29	1.88	59
		Total	3.39^b	1.84	113
	Robbery	Absent	4.32	2.53	57
		Present	4.15	2.22	54
		Total	4.23^b	2.37	111
	Perjury	Absent	4.08	2.28	61
		Present	3.87	1.90	54
		Total	3.98	2.11	115
	Total	Absent	3.98	2.25	172
		Present	3.75	2.02	167
		Total	3.87	2.14	339

Note. ^{a, b, c, d, e} indicate the means are significantly different from one another at $p < .01$.

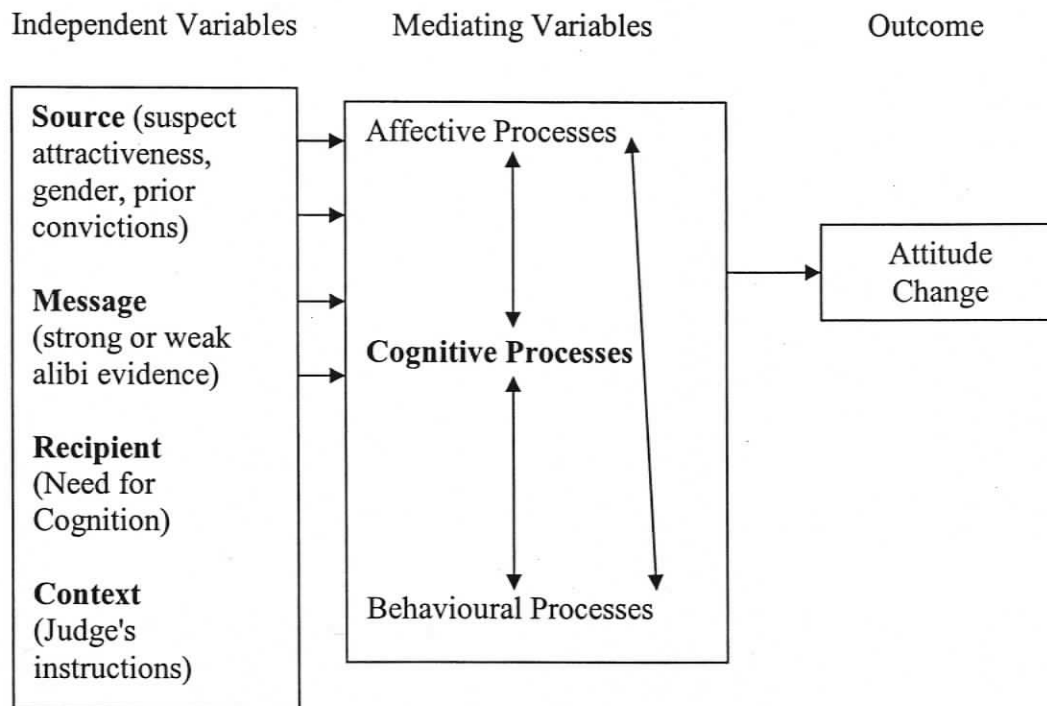


Figure 1. Model of Attitude Change (from Petty & Wegener, 1998).

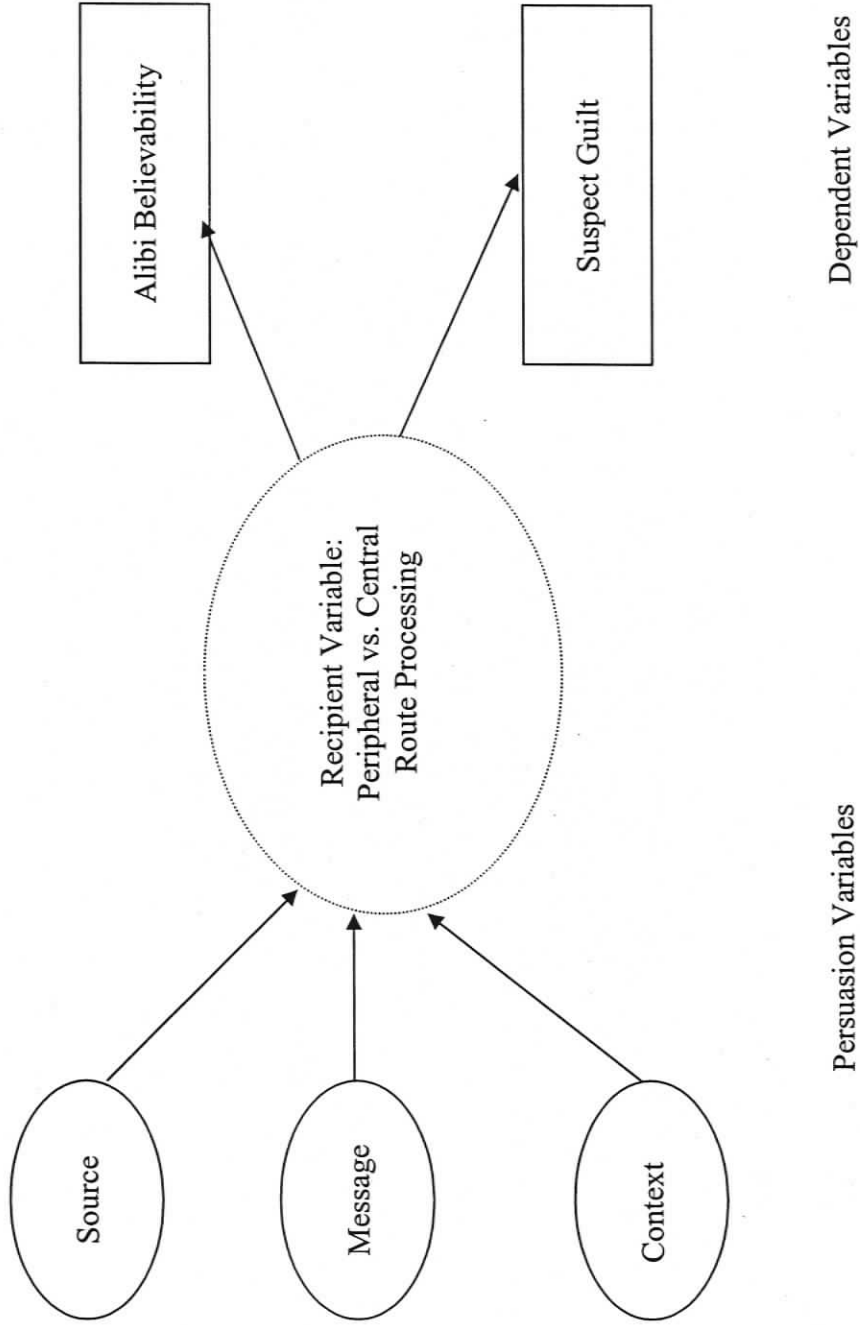


Figure 2. Elaboration Likelihood Model of Alibi Believability and Perceptions of Suspect Guilt.

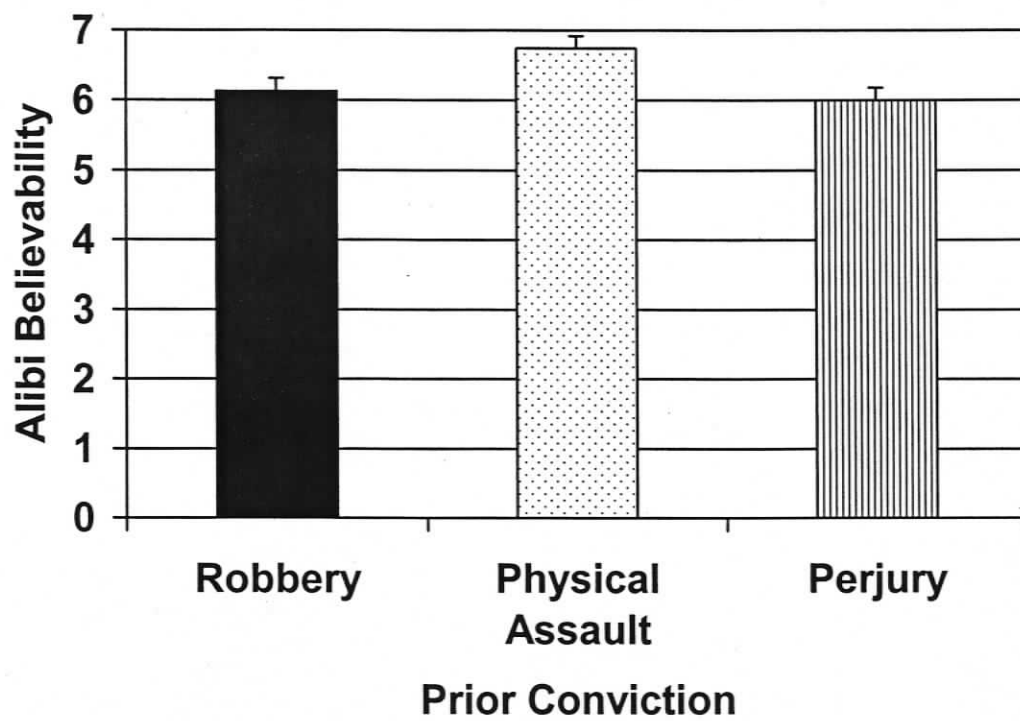


Figure 3. The Effect of Type of Prior Conviction on Alibi Believability Ratings.

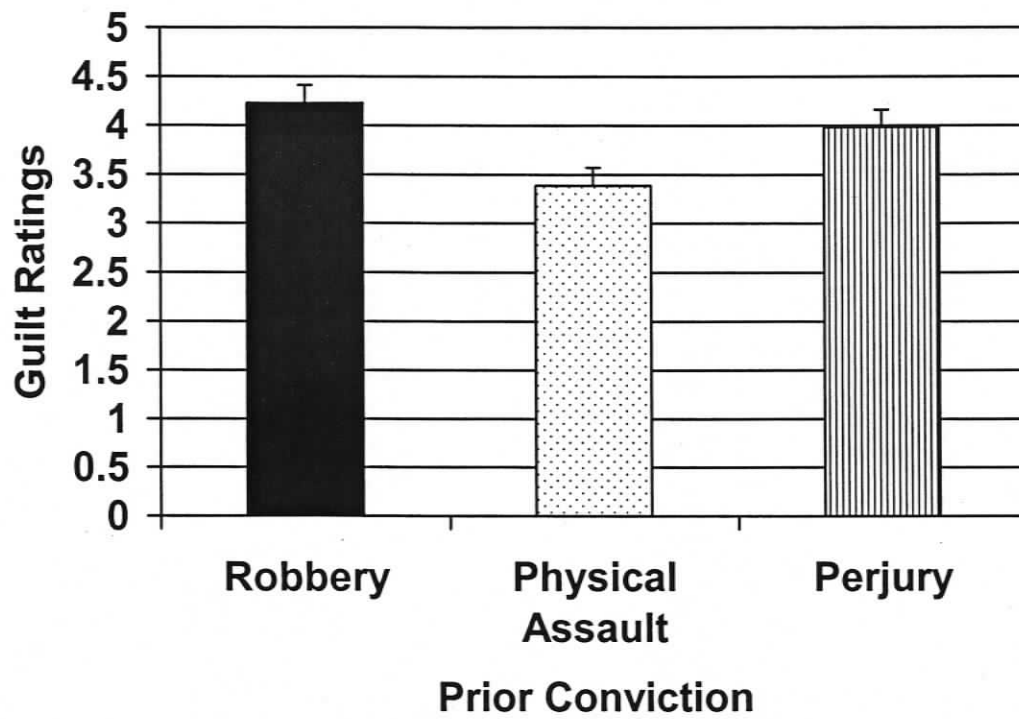


Figure 4. The Effect of Type of Prior Conviction on Guilt Ratings.

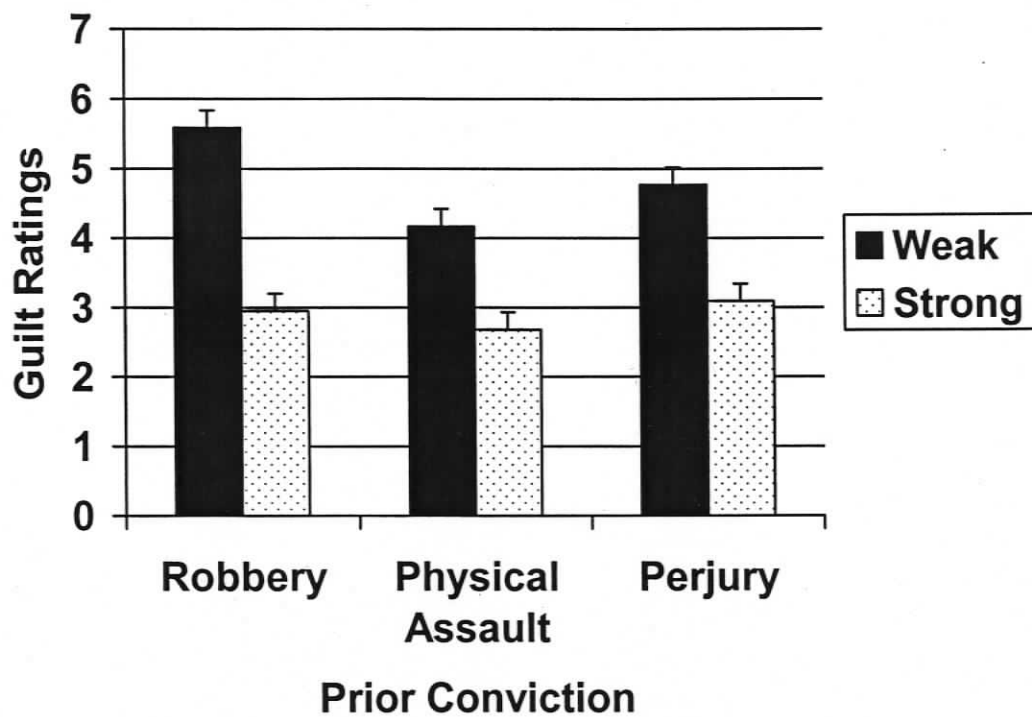


Figure 5. The Interaction of Strength of Alibi and Type of Prior Conviction on Guilt Ratings.

Appendix A

PowerPoint Presentation: Police Report and Experimental Instructions

PowerPoint Presentation (included voice-over in which a female professor read the information on each slide).

Police Report



Daytime view
of store

On January 14, 2004, at 8:00 pm, an individual dressed in black, with hair and face concealed behind a ski mask, entered a convenience store in a mid-sized city.

- The clerk was alone in the store at the time. The masked individual approached the clerk at the cash register, ordered her to open the register and then lie face down on the floor.
- The thief held one foot on the clerk's back while emptying the contents of the register onto the counter. The thief stuffed the cash into a duffel bag, and then fled on foot.
- The clerk remained face down on the floor for a full minute after the thief had left. She got up and immediately notified police.







Police Investigation



- \$1000 cash was stolen from the register. The store had cash payments on hand because it was going to distribute the money to two supply companies.
- The timing of the theft raised some suspicion that the culprit may have had inside knowledge of the workings of the store – the culprit may have known that there would be extra cash in the register at the time of the theft.



- Before expanding their search, police investigators asked all 8 employees of the convenience store and 2 drivers from the supply companies where they were at 8 pm on January 14. 
 - Three employees from the convenience store were cleared
 - 1 was out of the country on vacation in Europe
 - 1 was in hospital for minor surgery
 - 1 was the clerk working in the store at the time of the robbery
- 
- One employee from a supply company was cleared 
 - He was making a delivery in another province that evening
 - 5 convenience store employees and 1 supply company employee were interviewed by police concerning their whereabouts at the time in question.
- 

Study 1: Experimental Instructions - Attractive Female Suspect



This is Charlotte Zachary - a suspect in the case. She is an employee of the convenience store and has not yet been cleared in the police investigation.

Experimental Instructions



1. You will hear an interview between two police officers and Charlotte Zachary (Suspect C. Z.).
2. After hearing the interview, you will be asked to evaluate Suspect C. Z. and her alibi in a questionnaire.



You are hearing an interview between Officer
John Wilson, Officer Sam Johnson and
Charlotte Zachary (Suspect C. Z.)

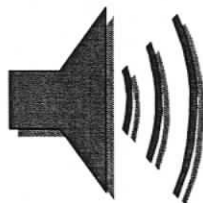
*Note: In the male version of the PowerPoint Presentation, the suspect was referred to as
"Charles Zachary".*

Study 2 Experimental Instructions. Note that in the "No Judge's Instructions" conditions, no information as given concerning judge's instructions.

Charles Zachary is on trial for the robbery. You will be asked to take on the role of "juror" and will evaluate the defendant on the basis of his alibi.

Experimental Instructions

1. You will hear an interview between two police officers and Charles Zachary (Defendant C. Z.).
2. Then you will be given instructions by the judge in the case.
3. After hearing the interview and the instructions, you will be asked to evaluate Defendant C. Z. and his alibi in a questionnaire.



You are hearing an interview between Officer
John Wilson, Officer Sam Johnson and
Charles Zachary.



You are hearing instructions from the judge in
the case.

Appendix B

Attractive and Unattractive Male
and Female Suspects (Study 1)

Male

Female

Attractive



Unattractive



Appendix C

Transcript of Interview

Key

JW: Officer John Wilson

CZ: Charlotte Zachary (Study 1 only) or Charles Zacharcy (Studies 1, 2, 3)

SJ: Officer Sam Johnson

Note that items written in italics were not included in the audiorecordings.

-----start of transcript-----

JW: Ok, this is Officer John Wilson, this, uh interview is being tape-recorded. Uh, it's Friday March the 12th, 2004, 5pm, uh, I'm here with Officer Sam Johnson and Charlotte/Charles Zachary. So, Charlotte/Charles, I know you've been interviewed already by Officer Smith, but we, we need to go over everything again. Ok, where were you during the evening of January the 14th?

CZ: I was at an Internet Café.

JW: And do you know the address of that café?

CZ: Umm, I don't know the exact address but it's on the corner of Carling and Cambridge.

JW: What time were you there?

CZ: Umm, between 7:30 and 8:30?

JW: And what, what were you doing there?

CZ: Umm, had some coffee, surfing the web, looked at some tv listings.

JW: How did you pay for the coffee?

CZ: With cash.

JW: Do you have a receipt for that?

CZ: No, I don't.

JW: Do you have any proof that you were there?

CZ: Umm, well I was there with my brother, so I guess he could vouch for that (*weak alibi*) / umm, there's the waitress who was working that night, um, I often see her when I'm there. She brought me coffee. (*strong alibi*)

SJ: One of our officers has already contacted your brother, uh, Mr. Robert Zachary. And, according to Mr. Zachary's statement, he said that you were there (*weak alibi*) / one of our officers already contacted, uh, the waitress, uh, her name's Tracy Jones. Ms. Jones' statement said, uh, that you were there. (*strong alibi*)

JW: Do you have any other proof that you were there that night?

CZ: Umm, no, not that I know of.

-----(*strong alibi condition only*)-----

SJ: Well, we've collected video from the café entrance. We're gonna cue that now to 7:25 pm... You can confirm your arrival time as 7:30?

CZ: Yeah, around then is when I came to the café.

SJ: Ok, let's fast-forward that tape.

[*sound of tape fast-forwarding*]

CZ: Oh! Yeah, that's me right there, coming in.

SJ: Ok, so we'll note the time as 7:28 pm. And, let's confirm that the time you were leaving was at 8:30 pm? Is that correct?

CZ: Yeah, sometime around there, I think.

SJ: Wa- let's fast-forward now to uh 8:25.

[*sound of tape fast-forwarding*]

CZ: Oh, there, yup, that's me leaving there.

SJ: note the time is 8:40

-----*Study 2 only*-----

JW: Well, I've been looking through our files on you. So, you've been convicted of a crime in past. Our file says you were convicted of robbery (*same crime*) / physical assault (*different crime - assault*) / perjury (*different crime - perjury*) two years ago.

CZ (*male only*): Strictly speaking, it wasn't robbery / physical assault / lying in court.

JW: Our files aren't wrong, it was robbery / physical assault / perjury, correct?

CZ (*male only*): yes

JW: Ok, well, do you have anything else to say?

CZ: Nno, not that I can think of.

JW: Alright, we're done for today, and we'll be in touch.

-----*end of transcript*-----

Appendix D

Questionnaire

SECTION I: Demographic InformationPlease write or check one response for each question below.

1. Your Age: _____

2. Your Gender: Female Male**SECTION II: Part 1**This section deals with your views of the suspect and the alibi. Please circle the number on the scale that most accurately reflects your view.

1. How believable is the suspect's alibi?

I do not believe
the alibi at allI believe the alibi
completely

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

2. What is the likelihood that the suspect is the person who committed the crime?

Very unlikely

Very Likely

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

3. How motivated were you to listen to the suspect's alibi?

I was not
motivated at allI was very
motivated

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

SECTION II: Part 2We often make assessments of other people's character. Please rate the extent to which you feel the following character traits describe the suspect by circling a number on the scale.Does not describe
this suspect at allDescribes this
suspect perfectly

	1	2	3	4	5	6	7	8	9	10
1. Suspicious	1	2	3	4	5	6	7	8	9	10
2. Cunning	1	2	3	4	5	6	7	8	9	10
3. Deceitful	1	2	3	4	5	6	7	8	9	10
4. Shy	1	2	3	4	5	6	7	8	9	10
5. Curious	1	2	3	4	5	6	7	8	9	10
6. Funny	1	2	3	4	5	6	7	8	9	10
7. Content	1	2	3	4	5	6	7	8	9	10
8. Honest	1	2	3	4	5	6	7	8	9	10
9. Open	1	2	3	4	5	6	7	8	9	10
10. Sincere	1	2	3	4	5	6	7	8	9	10
11. Scheming	1	2	3	4	5	6	7	8	9	10
12. Trustworthy	1	2	3	4	5	6	7	8	9	10

13. Calculating	1	2	3	4	5	6	7	8	9	10
14. Loyal	1	2	3	4	5	6	7	8	9	10
15. Intelligent	1	2	3	4	5	6	7	8	9	10
16. Shrewd	1	2	3	4	5	6	7	8	9	10
17. Friendly	1	2	3	4	5	6	7	8	9	10
18. Caring	1	2	3	4	5	6	7	8	9	10
19. Ambitious	1	2	3	4	5	6	7	8	9	10
20. Conniving	1	2	3	4	5	6	7	8	9	10

SECTION III: Scale

Please indicate the extent to which each of the following items applies to you by **circling** a number on the scale. There are no correct or incorrect answers and all of your answers are anonymous.

	Extremely Uncharacteristic of me				Extremely Characteristic of me
1. I would prefer complex to simple problems.	1	2	3	4	5
2. I like to have the responsibility of handling a situation that requires a lot of thinking.	1	2	3	4	5
3. Thinking is not my idea of fun	1	2	3	4	5
4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.	1	2	3	4	5
5. I try to anticipate and avoid situations where there is likely chance I will have to think in depth about something.	1	2	3	4	5
6. I find satisfaction in deliberating hard and for long hours.	1	2	3	4	5
7. I only think as hard as I have to.	1	2	3	4	5
8. I prefer to think about small, daily projects to long-term ones.	1	2	3	4	5
9. I like tasks that require little thought once I've learned them.	1	2	3	4	5
10. The idea of relying on thought to make my way to the top appeals to me.	1	2	3	4	5
11. I really enjoy a task that involves coming up with new solutions to problems.	1	2	3	4	5
12. Learning new ways to think doesn't excite me very much.	1	2	3	4	5
13. I prefer my life to be filled with puzzles that I must solve.	1	2	3	4	5
14. The notion of thinking abstractly is appealing to me.	1	2	3	4	5

15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.	1	2	3	4	5
16. I feel relief rather than satisfaction after completing a task that required a lot of mental effort.	1	2	3	4	5
17. It's enough for me that something gets the job done; I don't care how or why it works.	1	2	3	4	5
18. I usually end up deliberating about issues even when they do not affect me personally.	1	2	3	4	5

SECTION IV: Additional Questions

This section asks you additional questions. Please **circle**, **check** or **write** your answer in the space provided.

1. Have you ever been a juror in a civil or criminal trial? YES NO

2. What does the term "alibi" mean to you?

3. What was the date of the convenience store robbery?

- a) January 12th, 2004 c) March 12th, 2004
b) January 14th, 2004 d) March 14th, 2004

4. How much money was stolen?

- a) \$500 c) \$800
b) \$600 d) \$1000

5. Where did the suspect claim to have been at the time of the crime?

6. What physical proof did Suspect C. Z. claim to have in support of the alibi?

7. According to the suspect, which person could lend support to the alibi?

8. Do you regularly watch any of the following crime dramas on tv (check all that apply):

- America's Most Wanted
 Boston Legal
 Cold Case
 Crossing Jordan

- CSI Las Vegas
- CSI Miami
- CSI New York
- DaVinci's Inquest
- Law & Order
- Law & Order CI
- Law & Order SVU
- Numb3rs
- NCIS
- Without a Trace
- Other: _____

9. If you have any other comments about the alibi or suspect, then please write them below:

Study 2, Judge's Instructions Present conditions only:

10. How well did you understand the judge's instructions? Please circle your answer.

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

Did not
understand
at all

Understood
perfectly

11. Please write down everything you can remember from the judge's instructions.

Appendix E

Need for Cognition Scale

Also included in Questionnaire in Appendix D, Section III

(Cacioppo, Petty, & Kao, 1984)

Please indicate the extent to which each of the following items applies to you by circling a number on the scale. There are no correct or incorrect answers and all of your answers are anonymous.

1. I would prefer complex to simple problems.

1	2	3	4	5
---	---	---	---	---

Extremely uncharacteristic
of me

Extremely characteristic of
me

2. I like to have the responsibility of handling a situation that requires a lot of thinking.
3. Thinking is not my idea of fun.*
4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.*
5. I try to anticipate and avoid situations where there is likely chance I will have to think in depth about something.*
6. I find satisfaction in deliberating hard and for long hours.
7. I only think as hard as I have to.*
8. I prefer to think about small, daily projects to long-term ones.*
9. I like tasks that require little thought once I've learned them.*
10. The idea of relying on thought to make my way to the top appeals to me.
11. I really enjoy a task that involves coming up with new solutions to problems.
12. Learning new ways to think doesn't excite me very much.*

13. I prefer my life to be filled with puzzles that I must solve.
 14. The notion of thinking abstractly is appealing to me.
 15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.
 16. I feel relief rather than satisfaction after completing a task that required a lot of mental effort.*
 17. It's enough for me that something gets the job done; I don't care how or why it works.*
 18. I usually end up deliberating about issues even when they do not affect me personally.
-

*Reverse scoring was used on this item.

Appendix F

Judge's Charge to the Jury Re: Criminal Record of the Accused

(Ferguson & Bouck, 2004, 4.31)

1. When Charles Zachary gave evidence, he was asked whether he had ever been convicted of any criminal offence. He replied that he had been convicted of the following: robbery / physical assault / perjury.
2. This criminal record was introduced into evidence only for the purpose of testing the credibility or truthfulness of Charles Zachary as a witness. You may use the evidence of the criminal record when you consider Charles Zachary's credibility in order to decide whether a person with a criminal record of this nature is the kind of witness you might choose to believe. Please remember that a criminal record does not necessarily mean that someone is a liar, in the same way that a clean record does not necessarily mean that someone is truthful.
3. When you examine Charles Zachary's criminal record, you should consider three things:
 - (1) First, you should consider the nature of the offence. In particular, you should consider whether Charles Zachary has committed an offence that involves dishonesty. A conviction for an offence that involves dishonesty obviously has more bearing on credibility than a conviction for an offence that does not involve dishonesty.
 - (2) Second, you should consider when Charles Zachary committed the offence. A recent conviction may be more relevant to credibility than a conviction for an offence that was committed a long time ago.
 - (3) Third, you should consider the number of convictions. A single conviction for a

criminal offence is usually less serious than a long list of convictions.

These three factors should help you decide whether or not you will believe Charles Zachary's evidence.

It is important for you to understand that this previous conviction is not evidence of Charles Zachary's guilt. You are not allowed to treat this conviction as evidence that Charles Zachary is more likely to have committed the offence in the indictment. Also, you are not allowed to treat Charles Zachary's criminal record as evidence that he is more likely to commit criminal acts in general. The only reason this evidence of the criminal record was admitted, and the only way you can use it, is for the purpose of deciding whether or not you believe Charles Zachary's testimony.