

**HOW DO WE FEEL WHEN ANGELS TURN OUT TO BE DEMONS?:  
THE EXPERIENCE AND EFFECTS OF MISPERCEIVING MORAL CHARACTER**

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## **Abstract**

In everyday life, we make important judgments about other people's moral characters (Goodwin, Piazza, & Rozin, 2016). These judgments help us understand others (Hartley et al., 2016), predict what they are likely to do, and plan our decisions around them (van der Lee, Ellemers, Scheepers, & Rutjens, 2017). However, despite the importance of assessing character accurately, we occasionally encounter seemingly good people who surprise us by revealing bad moral character. How do we feel when we learn we have misjudged someone's moral character? In the present work, I apply theory from the Meaning Maintenance Model (MMM; Heine, Proulx, & Vohs, 2006) to investigate why such apparent misperceptions of character are aversive. In Chapter 2 (Study 1), I review how misperceiving character in everyday life predicts a sense of meaning violation, negative affect, and doubt regarding one's judgments of others. In Chapter 3 (Study 2), I review how experimentally manipulating misperceptions leads to similar consequences, and I compare these consequences to the effects of witnessing unsurprising immoral behavior. Taken together, these findings contribute to our understanding of how social perception provides meaning, and highlight the importance of moral character perception in meaning.

## **Lay Summary**

The present research investigates the experience of learning that one has misjudged another person's moral character. Specifically, we focus on experiences in which a seemingly good person turns out to be bad. Findings suggest that such character revelations about others lead to negative emotion and a sense that one's core beliefs have been violated. Moreover, individuals who feel they have misjudged others feel less confident making judgments about other people's character and also come to expect worse moral character from people in general. These findings contribute to current understandings of how unexpected social behavior affects perceivers, and also highlight the important role that moral character perception plays in helping perceivers feel that the world makes sense.

## **Preface**

Chapters 2 and 3 are based on work conducted in the Culture and Self Laboratory by Kate Wen Guan and Dr. Steven Heine. I (Kate Guan) was responsible for study design and data analysis. Dr. Heine supervised these activities. For studies requiring in-person data collection (Study 1), trained research assistants recruited and collected survey responses. These studies are approved by the Behavioral Research Ethics Board at the University of British Columbia under the protocol “Misperceptions of Character” (certificate number H18-00504).

## Table of Contents

<b>Abstract.....</b>	<b>iii</b>
<b>Lay Summary .....</b>	<b>iv</b>
<b>Preface.....</b>	<b>v</b>
<b>List of Tables .....</b>	<b>ix</b>
<b>List of Figures.....</b>	<b>x</b>
<b>Acknowledgments .....</b>	<b>xi</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
1.1 The Fundamental Need for Meaning .....	2
1.2 Perceptions of the Social World.....	3
1.3 Social Cognition and Meaning.....	4
1.4 The Centrality of Moral Character Perceptions .....	6
1.5 Social Expectancy Violations and Threats to Meaning .....	8
1.6 Unique Consequences of Misperceiving Moral Character .....	10
1.7 The Present Research .....	12
<b>Chapter 2: Retrospective Experiences of Misperceiving Character .....</b>	<b>13</b>
2.2 Study 1 .....	13
2.2.1 Method.....	14
2.2.1.1 Participants.....	14
2.2.1.2 Procedure .....	15
2.2.1.3 Measures .....	16
2.2.1.3.1 Impressions of the Target.....	17
2.2.1.3.1.1 Character Judgment .....	17
2.2.1.3.1.2 Impression Confidence .....	18
2.2.1.3.1.3 Impression Importance .....	18
2.2.1.3.2 Social Belief Measures.....	18
2.2.1.3.2.1 Confidence Judging Others' Character.....	18
2.2.1.3.2.2 Impressions of People.....	18
2.2.1.3.2.3 Predictable World Beliefs.....	19
2.2.1.3.3 Perceptions of the Target's Behavior .....	19
2.2.1.3.3.1 Inconsistency of Behavior .....	19
2.2.1.3.3.2 Morality of Behavior .....	19
2.2.1.3.3.3 Duplicity .....	19
2.2.1.3.4 Affective and Motivational State .....	20
2.2.1.3.4.1 Sense of Meaning Violation .....	20
2.2.1.3.4.2 Negative Affect.....	20
2.2.1.3.5 Judgments of the Target's Behavior.....	21
2.2.1.3.5.1 Judgments of Blame .....	21
2.2.2 Results .....	21
2.2.2.1 Description of Events.....	21
2.2.2.2 Consequences of Misperceptions.....	22
2.2.2.3 The Role of Inconsistency of Behavior in Predicting Consequences .....	26

2.2.2.3.1 Exploring the Relationship Between Inconsistency of Behavior and Different Types of Social Beliefs .....	28
2.2.2.4 Interactions between Inconsistency and Morality of Behavior in Predicting Consequences.....	30
2.2.2.5 The Role of Impression Confidence and Importance .....	34
2.2.2.5.1 Role in Predicting Consequences of Misperceptions.....	34
2.2.2.5.2 Role in Predicting Later Judgments .....	37
2.2.2.6 Exploratory Mediation Models Predicting Later Judgments .....	38
2.2.3 Discussion.....	41
2.3.3.1 Emotional Profile of Misperceptions of Character .....	42
2.3.3.2 How Misperceptions Threaten Meaning.....	44
2.3.3.2 How Misperceptions Affect Impression Updating .....	45
2.3 Limitations .....	46
2.4 Future Directions.....	48
<b>Chapter 3: Misperceiving Character in the Lab.....</b>	<b>50</b>
3.1 Study 2 .....	50
3.2.1 Method.....	51
3.2.1.1 Participants.....	51
3.2.1.2 Procedure .....	52
3.2.1.3 Impression Formation Activity .....	53
3.2.1.3.1 Target Profile.....	53
3.2.1.3.2 Time 1 .....	53
3.2.1.3.2.1 Inconsistent Target Condition .....	54
3.2.1.3.2.2 Consistent Target Condition.....	54
3.2.1.3.3 Time 2 .....	54
3.2.1.4 Measures .....	55
3.2.1.4.1 Measures List .....	55
3.2.1.4.1.1 Manipulation Checks .....	55
3.2.1.4.1.2 Impressions of the Target.....	55
3.2.1.4.1.2.1 Character Judgment.....	56
3.2.1.4.1.2.2 Impression Confidence.....	56
3.2.1.4.1.2.3 Impression Importance.....	56
3.2.1.4.1.3 Affective and Motivational Consequences .....	56
3.2.1.4.1.3.1 Prostitute Bond.....	56
3.2.1.4.1.3.2 Worldview Affirmation.....	57
3.2.1.4.1.3.3 Uncanny Measure.....	57
3.2.1.4.1.3.4 PANAS.....	58
3.2.1.4.1.4 Social Beliefs .....	58
3.2.1.4.1.5 Confidence Judging Others' Character Direct Measure .....	58
3.2.1.4.1.6 Confidence Judging Others' Character Indirect Measure .....	58
3.2.1.4.1.7 Impressions of People Direct Measure.....	59
3.2.1.4.1.8 Impressions of People Indirect Measure .....	59
3.2.2 Results .....	59
3.2.2.1 Manipulation checks. ....	60
3.2.2.1.1 Perceptions of the targets before and after.....	60

3.2.2.1.2 Impression change. ....	62
3.2.2.2 Meaning Threat .....	62
3.2.2.2.1 Prostitute Bond. ....	62
3.2.2.2.2 Worldview Affirmation. ....	63
3.2.2.2.3 Uncanny. ....	63
3.2.2.3 Negative Affect .....	63
3.2.2.4 Broader Social Beliefs.....	64
3.2.2.4.1 Confidence Judging Others. ....	64
3.2.2.4.1.1 Direct Measure. ....	64
3.2.2.4.1.2 Indirect Measure.....	64
3.2.2.4.2 Impressions of People. ....	65
3.2.2.4.2.1 Direct Measure. ....	65
3.2.2.4.2.2 Indirect Measure.....	65
3.2.2.5 Moderators of Misperception Experiences and Effects .....	65
3.2.2.5.1 The Role of Initial Impression Importance.....	68
3.2.2.5.2 The Role of Initial Impression Confidence .....	68
3.2.3 Discussion.....	69
2.4 Limitations .....	71
2.5 Future Directions.....	73
<b>Chapter 4: General Discussion .....</b>	<b>76</b>
4.1 Summary of Findings .....	76
4.2 Implications .....	77
4.3 Limitations .....	81
4.4 Future Directions.....	83
4.5 Conclusion.....	86
<b>Bibliography .....</b>	<b>87</b>
<b>Appendices.....</b>	<b>102</b>
Appendix A: Supplementary Materials, Chapter 2 .....	102
A.1 Study 1 .....	102
Appendix B: Supplementary Materials, Chapter 3 .....	111
B.1 Study 2 .....	111



## List of Tables

Table 2.1. Demographic Composition of Study 1 Participants .....	15
Table 2.2. Order of Measures in Study 1 .....	17
Table 2.3. Demographic Composition of Targets in Study 1 .....	22
Table 2.4. Descriptive Statistics and Correlations for Key Variables in Study 1 .....	23
Table 2.5. Posthoc Comparisons of Types of Negative Affect.....	24
Table 2.6. Descriptive Statistics for Social Belief Measures at Time 1 and Time 2 .....	25
Table 2.7. Inconsistency of Behavior Predicting Consequences of Misperceptions .....	27
Table 2.8. Inconsistency and Morality of Behavior Predicting Consequences of Misperceptions .....	31
Table 2.9. Inconsistency and Morality of Behavior Predicting Different Types of Negative Affect .....	32
Table 2.10. Impression Confidence (Time 1) Predicting Consequences of Misperceptions.....	35
Table 2.11. Impression Confidence (Time 1) Predicting Specific Types of Negative Affect.....	35
Table 2.12. Impression Importance (Time 1) Predicting Consequences of Misperceptions .....	36
Table 2.13. Impression Importance (Time 1) Predicting Specific Types of Negative Affect .....	36
Table 3.1. Order of Measures for the Inconsistent Target and Consistent Target Conditions .....	55
Table 3.2. Descriptive Statistics for Key Measures Across Conditions in Study 2.....	60
Table 3.3. Posthoc Comparisons of Character Judgments across Time and Condition .....	62
Table 3.4. Impression Importance (Time 1) Predicting Meaning Threat and Negative Affect....	66
Table 3.5. Impression Importance (Time 1) Predicting Social Belief Measures.....	66
Table 3.6. Impression Confidence (Time 1) Predicting Meaning Threat and Negative Affect....	67
Table 3.7. Impression Confidence (Time 1) Predicting Social Belief Measures.....	67

## List of Figures

Figure 2.1. Indirect Effect of Inconsistency of Behavior on Confidence Judging Others'

Character (Time 2) through Predictable World Beliefs (Time 2)..... 29

Figure 2.2. Indirect effect of Impression Importance (Time 1) on Character Judgment (Time 3)

through Sense of Meaning Violation ..... 39

Figure 2.3. Indirect effect of Impression Importance (Time 1) on Character Judgment (Time 3)

through Sense of Meaning Violation and Duplicity ..... 40

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## Chapter 1: Introduction

In the popular tale Little Red Riding Hood, Little Red makes two critical errors in judgment. First, she trusts a seemingly friendly wolf with the information that she is going to her grandmother's house. This information helps him hatch a nefarious plan to trick and eat her. Second, once Little Red arrives at her grandmother's house, she again makes a near-fatal error in judgment when she fails to notice that her kindly "grandmother" is actually the wolf in disguise. She barely escapes with her life. Although all ends well in this story, Little Red's recurring lapses in judgments warn of the mortal dangers inherent in misperceiving someone's character.

Many cultural narratives feature this similar trope, depicting a seemingly good character who shocks us by revealing that they have been evil all along. Well-known examples of this include Judas' betrayal of Christ, Ciphher's betrayal of his friends in the Matrix, and Palpatine's reveal as Darth Sidious in Star Wars. Although these occurrences seem far flung, people also stand to experience such revelations in everyday life. When the hidden misdeeds of well-known public figures come to light, community members are often blindsided by the truth of these individuals' character. And we all stand to occasionally witness other bad behaviors in some of our closest and most trusting relations, making us question our judgments of others.

What happens when people experience these types of character revelations about individuals they previously admired, trusted, and held in high esteem? How do these character revelations affect the way people make judgments about others, and their broader sense that they can understand and control the world around them?

People often act in inconsistent and unexpected ways, prompting the need for perceivers to re-evaluate their expectations of others (for a review, see Mende-Siedlecki, 2018). These discrepancies in behavior pose difficulties both for forming coherent impressions of others (Srull

& Wyer, 1989) as well as predicting the agent's future behavior (Bettencourt et al., 1997; Mendes, Blascovich, Hunter, Lickel, & Jost, 2007). As such, unexpected behaviors are generally disliked (Olson, Roese, & Zanna, 1996). In the present research, we investigate whether witnessing others' behavioral inconsistency has broader consequences for perceivers' judgments of others and feeling that the world makes sense. We apply theory from research on the meaning maintenance model (MMM; Heine, Proulx, & Vohs, 2006), and propose that specific types of unexpected social behavior can have broader epistemological impacts on perceivers' sense of meaning. Specifically, we focus on unexpected social behaviors that prompt character revelations, or revelations that one is wrong about another person's underlying moral character.

Across two studies, we investigate whether and how such character revelations affect perceivers' broader sense of meaning. We contend that people's ability to judge others' moral character is central to the way they form meaning about the social world. As such, finding out that one has misjudged another's character may lead to both immediate uncertainty about that specific individual, as well as broader uncertainty about other people one may have also misjudged. This broader uncertainty may then threaten one's sense that the world is safe, orderly, and predictable. As such, apparent misperceptions of even one person's character may pose an expansive threat to meaning, and should therefore be aversive. The present studies investigate this theory using data from people's real past experiences with moral character revelations, as well as evidence collected from a controlled experimental study.

### **1.1 The Fundamental Need for Meaning**

People have an innate need to feel like they can know, predict, and therefore control the world around them (e.g. Biner, Angle, Park, Mellinger, & Barber, 1995; Bruner, 1957). Because people live in complex social and cultural worlds, they must continuously diagnose their surroundings

for likely threats and benefits. Over time, people develop assumptions about what exists in their surrounding environments and how these elements are likely to change in the future. These assumptions form mental frameworks that represent what we know about the world, mapping out all the expected relationships that we perceive between different elements around us (e.g. Janoff-Bulman, 1992; Heine, Proulx, & Vohs, 2006). So far as these expected relations are internally consistent with each other, and appear to map onto events as they occur in the world, we feel that these internal meaning frameworks are valid, reliable, and coherent. We can then use these meaning frameworks to protect ourselves from threat and guide us towards actions that lead to beneficial consequences (Heine, Proulx, & Vohs, 2006).

## **1.2 Perceptions of the Social World**

When constructing these meaning frameworks, people form assumptions about three different realms of knowledge: (1) elements in the external world, (2) elements within the self, and (3) the self in relation to the outside world. Both the first and the third realms concern the outside world and how one navigates their surroundings. As social animals, however, our surrounding environments are largely made up of the complex social structures around us. We survive based on our ability to relate to others (Baumeister & Leary, 1995), to attend to the power dynamics of those around us (Anderson, Hildreth, & Howland, 2015), and to strategize based on the threats and benefits that other social agents present to us (Everett, Faber, Savluescu, & Crockett, 2018; Martin & Cushman, 2015; van der Lee, Ellemers, Scheepers, & Rutjens, 2017). As such, much of our meaning frameworks constitute our perceptions of the social world around us and the expected relations between other agents and ourselves.

Given the primary importance of forming knowledge of the social world, how do we go about acquiring information about others? After all, we do not have access to others' internal

states. Instead, humans are equipped with an impressive arsenal of social perception abilities that allow us to infer a rich depth of information about others from even minimal contact with them. Within the first few seconds of observing someone, people are able to make relatively accurate judgments about others based off of their non-verbal behavior (Ambady & Rosenthal, 1993) and facial appearance (Zebrowitz, 2017). Indeed, people infer trustworthiness from faces quickly, and with high cross-cultural consensus (Rule et al., 2010; Krumhuber et al., 2007; Willis & Todorov, 2006; Zebrowitz, Voinescu, & Collins, 1996). Moreover, the inferences we make from observing even seconds of nonverbal behavior tend to be relatively accurate (Ambady & Rosenthal, 1992). These inferences occur automatically (Carlston & Skowronski, 2005; Gilbert & Malone, 1995; Newman & Uleman, 1989), and the tendency to form them originates early in childhood (Cogsdill, Todorov, Spelke, & Banaji, 2014). With these abilities in hand, we are therefore able to extract meaningful information about other social agents early in our social interactions with them.

### **1.3 Social Cognition and Meaning**

Insofar as we are motivated to make meaning about the social world, these inferential tools are critical to our ability to acquire knowledge and form connective assumptions about others. Indeed, much research finds that these social inference tools help us predict others' future behavior, guide our decision-making around them, and help preserve our safety.

First, social judgment seems primarily concerned with prediction. When forming impressions, people exhibit a pervasive tendency to make dispositional attributions and, specifically, trait judgments about others (for reviews, see Skowronski, Carlston, & Hartnett, 2008; Uleman, Newman, & Moskowitz, 1996; Uleman, Saribay, & Gonzalez, 2008). By forming trait judgments, people attribute others' behavior to intrinsic qualities within them that remain

stable over time (Jones & Davis, 1965; Ross & Nisbett, 1991; see Moskowitz & Olcaysoy, Okten, 2016). As such, people feel confident predicting future behavior from observations of others' current behavior. Although the tendency for trait judgments varies between individuals (Dweck, Chiu, & Hong, 1995) and cultures (Chiu, Hong, & Dweck, 1997; Norenzayan, Choi, & Nisbett, 2002), this general pattern nevertheless suggests a desire for social prediction. Even spontaneous trait inferences, formed without perceivers' conscious awareness, help them predict what others are likely to do (McCarthy & Skowronski, 2011).

In tandem with this ability to predict others' behavior, people also use these judgments to inform their decision-making around others. After all, knowledge about others allows us to decide how we should act around them. People use implicit judgments of others' trustworthiness to inform how they should act in trust games (van't Wout & Sanfey, 2008). Indeed, even facial judgments of others influence the types of criminal-sentencing outcomes people assign them (Wilson & Rule, 2015). Finally, spontaneous trait inferences people form about others predict whether they feel they should approach or avoid them (Crawford, McCarthy, Kjørstad, & Skowronski, 2013).

Our ability to extract social information from observations of others therefore helps us understand and predict others' behavior, make decisions around them, and keep ourselves safe. This ability is therefore critical to our broader goal of constructing meaning. Indeed, the perspective that social perception serves meaning is widely reflected in the core assumptions of several fields across social psychology (e.g. stereotyping (e.g. Weary, Jacobson, Edwards, & Tobin, 2001), attribution (e.g. Burger & Hemans, 1988; Kelley, 1967), and cognitive consistency (e.g. Swann, 1990)). From this view, our perceptions of others make up the content of our meaning frameworks, and provide us with confidence that we understand and predict the social



world around us. As such, the reliability of our meaning frameworks also hinge on the reliability of our perceptions of others. We must therefore be able to use our social perception abilities, and be able to trust these abilities, in order to move through the world with a sense of meaning.

#### **1.4 The Centrality of Moral Character Perceptions**

Given the variety of dimensions on which we can judge other people, there may be certain domains of impression formation that matter more for meaning than others. People are complex targets, and exhibit traits that speak to different characteristics, such as friendliness, competence, and morality (Fiske, Cuddy, & Glick, 2007; Goodwin, Piazza, & Rozin, 2014). Certain dimensions of person knowledge may be more meaningful if they provide more predictive ability, more decision-making guidance, and more of a sense that we truly know others.

One candidate for this is the dimension of moral character, which reflects whether people seem like good or bad people at heart (Goodwin, Piazza, & Rozin, 2014). First, social perceivers care more about extracting moral character information about others than inferring any other type of information. Perceivers seek out moral character information upon first meeting others (Brambilla, Rusconi, Sacchi, & Cherubini, 2011), and make these types of judgments automatically and effortlessly (Fiske, Cuddy, & Glick 2007; Hamlin, Wynn, & Bloom, 2007; Willis & Todorov, 2006). Moreover, people weigh this information most heavily when forming global impressions of others (Goodwin, Piazza, & Rozin, 2014) and view moral traits as being more informative than other types of traits they can learn about someone (De Bruin & Van Lange, 2000; Judd, James-Hawkins, Yzerbyt & Kashima, 2005).

Second, moral character perceptions are critical in predicting others' behavior and in guiding our behavior around others. Throughout our evolutionary history, social interactions with others were often a source of fatal threat (Schaller, 2008). We must have developed the

ability to detect threats in others, as well as to detect likely cheaters or defectors. When we form moral impressions of others, we are able to detect and track such social threats. Accordingly, we use information about others' character to infer their intentions, and to assess whether we should interact or cooperate with these individuals (Landy, Piazza, & Goodwin, 2016; Everett, Faber, Savluescu, & Crockett, 2018; Martin & Cushman, 2015; van der Lee, Ellemers, Scheepers, & Rutjens, 2017).

Finally, moral character perceptions are central to the feeling that we truly know who another person is. Moral character is core to the way we see human identity (Skitka, Baumann, & Sargis, 2005). Out of all other trait dimensions, feeling like we know someone's moral traits is most central to feeling like we know and understand who that person is (Hartley et al., 2016). Moreover, people believe that moral character reflects others' true selves, the part of them that is most authentic and unchanging (Strohming & Nichols, 2014). Finally, people view morally-relevant behavior as more diagnostic of a person's underlying traits than any other type of behavior, and are quickest to use this information when inferring the stable traits that define who others are (Mende-Siedlecki, Cai, & Todorov, 2013). In sum, when we judge others' moral character, we feel we are judging their true nature.

The primacy of moral character judgments in prediction and decision-making, as well as its importance in our perceived knowledge about others, suggests that these perceptions may play a uniquely important role in furnishing our world with meaning. Specifically, our meaning frameworks about the social world may be populated with our assessments of others' moral character. Therefore, we may depend especially on the accuracy of our moral character perceptions for navigating our environments with confidence.

## **1.5 Social Expectancy Violations and Threats to Meaning**

Given the importance of person perception, and specifically moral character perception, in our construction of meaning, we propose that violations to these perceptions may pose unique threats to our sense of meaning.

Any anomalous event we encounter may threaten our sense of meaning, as such an event signals a potential error in the assumptions we hold (Heine, Proulx, & Vohs, 2006). These potential errors prompt aversive arousal (Randles, Heine, & Santos, 2018), disrupting our sense of meaning, and motivating attempts to resolve the discrepancy in our assumptions. When faced with such anomalies, people must either assimilate this event into their existing assumptions, accommodate their assumptions to fit with this anomalous event, or switch their focus to an alternate meaning framework they can affirm instead (Piaget, 1960; Park & Folkman, 1997; Thompson & Janigan, 1988; Heine, Proulx, & Vohs, 2006).

Much research on meaning threats focus either on threatening stimuli such as reminding participants of their death (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989), or on subtle anomalous events such as strangely coloured playing cards (Proulx & Heine, 2006). However, despite the widespread assumption that social perception is important for meaning, little research has directly tested whether our perceptions of others affect meaning and whether anomalies in these perceptions threaten meaning (for an exception, see Plaks, Grant, & Dweck, 2005 on violations of implicit theories of personality). In the present research, we therefore focus on experiences in which people learn that their impressions of others are wrong.

Because people are complex, it is common for perceivers to encounter targets who violate their expectations. Social expectancy violations command attention, and people take more time processing these behaviors (Jones & McGillis, 1976; Hemsley & Marmurek, 1982; Srull, 1981).

Furthermore, expectancy violations increase perceivers' uncertainty, as they signal that the target's future actions may also be unexpected (Bettencourt, Dill, Greathouse, Charlton, & Mulholland, 1997; Olson, Roese, & Zanna, 1996). Unexpected behaviors from others therefore elicit cardiovascular responses similar to threat (Mendes, Blascovich, Hunter, Lickel, & Jost, 2007) and also elicit anxiety (Hebl, Tickle, & Heatheron, 2000). Finally, these experiences demand heightened cognitive effort (Mendes, Blascovich, Hunter, Lickel, & Jost, 2007) and prompt attempts to make sense of the other person's mental states (Dungan, Stepanovic, & Young, 2016). In sum, social expectancy violations are usually flagged, disliked, and call for searches to resolve the discrepancy between one's expectations and reality.

Beyond these immediate affective responses, we propose that certain expectancy-violating behaviors also pose a threat to perceivers' broader sense of meaning. Based on our need to understand the world around us, expectancy-violating behavior may implicate our sense that we can know and predict others well. Moreover, certain types of social expectancy-violations should impact the perceiver more than others. Although much of the past research on social expectancy violations focuses on violations of stereotype-based expectancies (e.g. Cloutier, Gabrieli, O'Young, & Ambady, 2011), it may be more impactful when a target violates a previous impression that the perceiver has directly formed about them. If we depend on our social inference abilities to make judgments about the world around us, it ought to be more disturbing, for instance, to learn that an old friend is hiding a secret identity, compared to meeting someone who is simply different from their supposed group. Moreover, it may be most threatening to learn that one's moral character perception of another is wrong, as this violates the most central way in which we judge others. The present research therefore investigates the unique impact that character revelations about others has on our sense of meaning.

## **1.6 Unique Consequences of Misperceiving Moral Character**

When someone's moral behavior suggests they are not the person you think they are, this behavior should be both deeply and broadly threatening to the perceiver. First, given the importance of moral character perceptions in feeling like we know others, misperceptions of moral character represent the most definitive way in which our views of another person can be refuted. Furthermore, given the relevance of moral character assessments to our perceived safety, such apparent errors may signal real threats to safety. Failure to accurately interpret others' moral intentions, for example, often leads to negative consequences such as danger or exploitation (for a similar discussion, see Harris & Fiske, 2010). Rather than just feeling uncertain about the target's next actions, people in this position may feel anxiety at the prospect that the target is wholly different from who they seemed to be and potentially dangerous. As such, behaviors that prompt character revelations about others should be deeply threatening.

These behaviors should also be broadly threatening. Given the importance with which we weigh moral character perceptions, and its centrality to social perception, an error in judging another's character may signal a broader flaw in our ability to judge others' character. In other words, if you misjudge a poisonous fruit for a delicious treat, this might lead you to question whether the other food you think look delicious are actually poisonous. In this way, apparent errors in misjudging one person's character may implicate past and future judgments of others' character. This may therefore cast doubt on the reliability of our meaning frameworks as a whole. In sum, character revelations about others may pose both deep and broad threats, leading to less confidence making judgments about others' character, and therefore a greater sense that dangers lurk all around.

Although all apparent misperceptions of character may be aversive, certain moderators may increase the effect these errors have on our sense of meaning. First, misperceptions should be more threatening if the perceiver is more confident in the accuracy of the impression they hold of the target. In this case, impression-disconfirming behavior should be more surprising and be a clearer indicator that one's perceptions of others is flawed. Second, misperceptions should also be more threatening if the perceiver is more invested in the accuracy of that impression. There are often cases in which people care more about judging others' character accurately, such as when making costly investment decisions like choosing a mate (Buss & Barnes, 1986) or choosing a cooperation partner (van't Wout & Sanfey, 2008). In this case, impression-disconfirming behavior may also present a stronger signal that one's judgments of others is wrong, as the perceiver made a mistake when they truly cared about accuracy. In the present research, we therefore investigate the role of both of these moderators.

Finally, in this research, we focus exclusively on misperceptions of apparently good targets who turn out to be bad. Although we propose that accurate perceptions are important irrespective of whether the target turns out to have good or bad moral character, perceivers may care more about having accurate perceptions of those with bad moral character. People demonstrate a well-known negativity bias in making judgments about others (Rozin & Royzman, 2001). They are quicker to form negative moral character judgments about others (Fiske, 1980), and weigh negative information more strongly than positive moral information (Klein & O'Brien, 2016). This bias is functional, as it is more important to be able to detect threats than benefits (e.g., Nesse's (2005) smoke detector principle). Additionally, people may also be predisposed to like when bad people change for the better, as they often forgive others (Siegel, Mathys, Rutledge, & Crockett, 2018), and also admire others who overcome their character

defects (Klein & O'Brien, 2017). As such, character revelations in which targets turn out to be bad may be more significant than character revelations in the opposite direction, which may actually pose a pleasant surprise.

Taken together, we propose that apparent misperceptions in which good targets turn out to be bad present both deep and broad threats to meaning. We further expect that perceivers' confidence in their impressions, and investment in the importance of these impressions, moderate the negative effects these misperceptions have on perceivers' broader sense of meaning.

### **1.7 The Present Research**

Across two studies, we investigate whether and how such character revelations affect perceivers' broader sense of meaning. Specifically, we explore how the subjective experience of misperceiving another person's character affects perceivers' broader sense that they can make correct judgments about character in general, and that the world is safe, orderly, and meaningful. In Study 1 (Chapter 2), we investigate this question using data from people's real past experiences, identifying both the frequency of these experiences in daily life as well as the correlates and consequences of these experiences. In Study 2 (Chapter 3), we use an experimental design to test whether a misperception experience indeed elicits this specific pattern of affective, motivational, and cognitive consequences. In Chapter 4, we consider the implications of these findings for our theory, for other related theoretical topics, and also raise new questions regarding future avenues for research.

## **Chapter 2: Retrospective Experiences of Misperceiving Character**

The goal of Chapter 1 was to assess whether misperceptions of character are indeed threatening to people's sense of meaning, to investigate how they threaten meaning, and to explore the types of emotional responses these threats elicit. We conducted a correlational survey in which participants answered questions about their memories of past experiences in which they felt they had misjudged someone's character. Based on their recollections, we tested the core predictions of our theory, assessed the role of theorized moderators, and also explored different predictors of how participants came to judge the target. Findings from this first study provided initial evidence for our theory, which we followed up with an experimental investigation in Chapter 2.

### **2.2 Study 1**

The primary goal of Study 1 was to investigate whether misperceptions of character threaten perceivers' sense of meaning and elicit ensuing negative affect. We hypothesized that these experiences feel threatening to meaning, and elicit specific types of negative affect such as anxiety (which has been associated with violations to meaning (Proulx & Heine, 2008)), and disgust (which has been associated with judging immorality (Pizarro, Inbar, & Helion, 2011)). We further assess whether misperceptions lead people to feel less confident making judgments about others' moral character. Finally, we investigate whether moderators such as impression confidence and impression importance predict having more negative and threatening experiences.

We also had several exploratory goals. First, we aimed to assess the frequency with which these events take place in people's real lives, and the common relational contexts they take place in.



Second, we aimed to explore whether apparent misperceptions of character have other effects on participants' judgments of people and the world around them. When one is faced the revelation that a seemingly good person may actually be bad, they may generalize this experience to think that other people are also worse than they seem. Moreover, witnessing unexpected behaviors may make the world seem less predictable in general. We therefore aimed to test whether misperceptions also elicit more negative impressions of others and make the world seem less predictable.

Finally, we wanted to explore different predictors of participants' later judgments of the target. If misperceptions indeed threaten perceivers' sense of meaning, perceivers may be motivated to restore a sense of meaning by blaming the target for misrepresenting themselves (e.g., Heine, Proulx, & Vohs, 2006). We therefore explored whether the degree of meaning violation experienced predicts later impression updating, and in what ways.

## **2.2.1 Method**

### **2.2.1.1 Participants**

We recruited 600 participants from Amazon Mechanical Turk to fill out a prescreening questionnaire in order to select participants who had experienced misperceptions of character in the past. Of these 600, 434 participants (72%) reported that they had experienced apparent misperceptions of character, and went on to complete our main study. Out of this sample, we additionally excluded 52 participants for failing at least one of the two attention checks embedded in the study. We further excluded 9 participants for failing a 1-item English Reading Comprehension question. See the supplementary material in the Appendix for the full text of items used to exclude participants. Table 2.1 presents the demographic composition of this sample.

Table 2.1. Demographic Composition of Study 1 Participants

	Study 1
<i>N</i>	373
Gender	
Male	147
Female	222
Did not identify as either of the above	4
Age <i>M (SD)</i>	36.09 (11.82)
Ethnicity	
European	262
Hispanic	31
African	22
East Asian	12
South Asian	7
Middle Eastern	2
First Nations	3
South East Asian	6
Chose not to answer	13
Other	15
Education	
% with a postsecondary degree	49%

### 2.2.1.2 Procedure

We advertised the study on Amazon Mechanical Turk as being about social impressions and judgments of others. At the start of the study, participants read a description about misperceptions of character (see Appendix for full description and instructions). In this description, we described events in which one may feel they have misjudged another's moral character. We further suggested that this experience could take place with any type of individual,

from a romantic partner to a public figure. We then asked participants whether they could recall a specific past experience in which they felt serious doubt or questioning about someone whom they previously thought was a good person. We deliberately constructed a broader definition of misperceptions of character, as we wanted to sample both experiences in which participants felt they had definitively misjudged someone's character as well as experiences in which participants only felt momentary doubt.

Participants who reported having a specific experience in mind went on to complete the main study. The study asked participants to answer questions from the mental state they recalled holding at three specific past time points: before the event that triggered doubt (Time 1), during the event that triggered their doubt (Time 2), and after this event had passed (Time 3).

Participants proceeded through the questions for each time point in chronological order. At Time 1, participants described their earlier impressions of the target and their broader social beliefs at that time. This latter category of questions included questions about participants' moral impressions of people in general, the predictability of the world, and their confidence in their ability to judge others correctly. At Time 2, participants described the actual event that prompted their doubt about the target's character, and answered questions about their emotional and mental experience of this time. They again answered questions about their broader social beliefs at this time point. Finally, at Time 3, participants answered the same set of items provided at Time 1, with the tense changed to reflect this later time point. They also answered some additional questions about their judgments of the target's behavior at this time point.

### **2.2.1.3 Measures**

We report descriptive statistics and full items for all the measures in the supplementary material. Table 2.2 depicts the order in which different groups of measures were given to participants.

Where measures were repeated, we adapted the start of the question to reflect these respective time points (Time 1: “At that time (when you still held a positive impression of [target name])”/ Time 2: “During that time (when you had just learned this new information about [target name])”/ Time 3: “After coming to your new impression of [target name]”).

Table 2.2. Order of Measures in Study 1

Time Point	Time 1 (Before the Event)	Time 2 (During the Event)	Time 3 (After the Event)
Measures	<ul style="list-style-type: none"> <li>• Impressions of Target</li> <li>• Social Belief Measures</li> </ul>	<ul style="list-style-type: none"> <li>• Perceptions of Target’s Behavior</li> <li>• Affective and Motivational State</li> <li>• Social Belief Measures</li> </ul>	<ul style="list-style-type: none"> <li>• Impressions of Target</li> <li>• Social Belief Measures</li> <li>• Later Evaluations of Target’s Behavior</li> </ul>

### 2.2.1.3.1 Impressions of the Target

The following items were given to participants at Times 1 and 3.

#### 2.2.1.3.1.1 Character Judgment

We measured participants’ judgments of the target’s moral character using a 7-item measure used in past research (Barranti, Carlson, & Furr, 2016) ( $\alpha_{\text{Time 1}} = .92$ ,  $\alpha_{\text{Time 3}} = .94$ ). Participants rated their agreement to these items on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include, “[Target name] is a person of strong moral character,” and “I would say that [target name] is a good person.” We coded these items such that the specific target’s name appeared in each item.

#### **2.2.1.3.1.2 Impression Confidence**

We measured participants' confidence in their judgments using one item, "How confident were you that your impression of [target name] was correct?". Participants rated their confidence level on a scale of 1 (*extremely unsure*) to 7 (*extremely confident*).

#### **2.2.1.3.1.3 Impression Importance**

We measured how important this impression was to participants using two items, "How important was it to you that your impression of [target name] was correct?" and "How important was it to you that [target name] was a person of good moral character?". Participants rated the importance of their impression on a scale from 1 (*extremely unimportant*) to 7 (*extremely important*). At Time 1, these items were highly correlated ( $r = .70, p < .001$ ), but were less so at Time 3 ( $r = .25, p < .001$ ).

#### **2.2.1.3.2 Social Belief Measures**

The following items were given to participants at all three time points.

##### **2.2.1.3.2.1 Confidence Judging Others' Character**

We measured participants' confidence judging others' character using one item, "How would you have rated your abilities as a good judge of character during that time?". Participants rated their ability judging character on a scale from 1 (*extremely poor*) to 7 (*extremely good*).

##### **2.2.1.3.2.2 Impressions of People**

We measured participants' impressions of people in general using one item, "What was your overall impression of people in general during this time?". Participants rated their impressions of people on a scale from 1 (*extremely negative*) to 9 (*extremely positive*).

#### **2.2.1.3.2.3 Predictable World Beliefs**

We measured participants' views of the world as predictable using one item, "To what degree did you feel that the world was a fair and safe place during that time?". Participants rated their views of the world on a scale from 1 (*extremely unfair and dangerous*) to 7 (*extremely fair and safe*).

#### **2.2.1.3.3 Perceptions of the Target's Behavior**

The following items were given to participants at Time 2.

##### **2.2.1.3.3.1 Inconsistency of Behavior**

We measured participants' perceptions of the inconsistency of the target's actions using one item. Participants were first told to think about the "new information" they learned about the target that prompted them to doubt their initial impressions. They were then asked, "To what degree was this new information inconsistent with your initial impression of [target name]?"

Participants rated the inconsistency of this information on a scale from 1 (*not at all inconsistent*) to 7 (*extremely inconsistent*).

##### **2.2.1.3.3.2 Morality of Behavior**

We measured participants' perceptions of the immorality of the target's behavior using one item, "How moral or immoral did you think [target name]'s specific actions were?". Participants rated the morality of these actions on a scale from 1 (*extremely immoral*) to 9 (*extremely moral*).

##### **2.2.1.3.3.3 Duplicity**

We measured participants' perceptions of the target as duplicitous using one item, "At that time in your life, during which you felt like your initial impression of [target name] might not be correct, to what extent did you think that [target name] had intentionally given you a false

impression?” Participants rated the degree to which targets seemed duplicitous on a scale from 1 (*not at all*) to 7 (*extremely*).

#### **2.2.1.3.4 Affective and Motivational State**

The following items were given to participants at Time 2.

##### **2.2.1.3.4.1 Sense of Meaning Violation**

We measured participants’ sense of meaning violation using the 5-item Belief Violations subscale of the Global Meaning Violation scale (Park, Riley, George, Gutierrez, Hale, Cho, & Braun, 2016). Sample items all start with the same phrase, “When you think about how you felt before and after this experience, how much did the occurrence of this experience violate:” and sample questions include, “your sense that other forces have control in the world?” and “your sense that the world is a good and safe place?”. Participants responses on a scale from 1 (*not at all*) to 5 (*very much*).

Once we examined the loadings of these items, we found that item 3, which presumed religious belief (“your sense that God is in control?”), loaded most poorly ( $\lambda = .55$ ) onto the factor compared to the other items ( $\lambda > .70$ ). We therefore dropped this item, and only used 4 items for this measure ( $\alpha = .84$ ).

##### **2.2.1.3.4.2 Negative Affect**

We used a 5-item measure to capture negative affect ( $\alpha = .78$ ). All items start with the question, “During this experience, how much did you feel each of the following?” The 5 items measure 5 different types of negative affect, “Blue”, “Anxious”, “Frustrated”, “Distressed”, and “Disgusted”. Participants rated these items on a scale from 1 (*not at all*) to 7 (*extremely*).

### **2.2.1.3.5 Judgments of the Target's Behavior**

#### **2.2.1.3.5.1 Judgments of Blame**

At Time 3, we measured the degree to which participants blamed targets for their actions using one item, “How much did you ultimately blame [target name] for the behavior he/she exhibited during this experience?” Participants answered on a scale from 1 (*not at all*) to 7 (*extremely*).

### **2.2.2 Results**

#### **2.2.2.1 Description of Events**

Table 2.3 presents the descriptive statistics for the various types of targets that participants described. The described misperceptions took place most commonly in the context of friendships, romantic relationships, and workplace relationships. The age of the target tended to match the age of the participant ( $r = .56, p < .001$ ), and targets were more commonly male (62%). There was a broad range in how long ago these experiences took place, although the most frequently provided response was two years ago. Finally, there was a broad range in how long after meeting the target these experiences tended to occur, with the most frequent response being that they tended to occur within the first one or two years of knowing the target.



Table 2.3. Demographic Composition of Targets in Study 1

	<i>n</i>
Relationship Type	
Stranger	1
Acquaintance	29
Co-Worker	63
Friend	131
Romantic Partner	76
Family Member	27
Public Figure	27
Other	15
Gender	
Male	233
Female	139
Unidentified	1
Age <i>M (SD)</i>	39 (15.09)
Time Since Event <i>M (SD)</i>	5.59 (6.97)
Time After Meeting <i>M (SD)</i>	5.16 (7.35)

#### 2.2.2.2 Consequences of Misperceptions

We tested our core predictions that misjudging someone's character would violate participants' sense of meaning, elicit negative affect, and decrease their confidence making judgments about other people's character. Table 2.4 presents the descriptive statistics and zero-order correlations between all key variables in these analyses.

Table 2.4. Descriptive Statistics and Correlations for Key Variables in Study 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	<i>M</i>	<i>SD</i>
(1) Sense of Meaning Violation											2.88	1.15
(2) Negative Affect	<b>.57***</b>										4.74	1.40
(3) Confidence Judging Others' Character (Time 2)	<b>-.19***</b>	<b>-.23***</b>									3.76	1.67
(4) Impressions of People (Time 2)	<b>-.25***</b>	<b>-.19***</b>	<b>.43***</b>								4.32	1.97
(5) Predictable World Beliefs (Time 2)	<b>-.26***</b>	<b>-.22***</b>	<b>.45***</b>	<b>.60***</b>							3.52	1.39
(6) Inconsistency of Behavior	<b>.13*</b>	<b>.13*</b>	-.08	-.06	<b>-.12*</b>						6.02	1.67
(7) Morality of Behavior	-.05	<b>-.23***</b>	<b>.17**</b>	<b>.24***</b>	<b>.14**</b>	<b>-.21***</b>					2.77	1.92
(8) Initial Impression Confidence	.09	<b>.15***</b>	.03	.05	<b>-.11*</b>	<b>.39***</b>	-.08				5.80	1.03
(9) Initial Impression Importance	<b>.31***</b>	<b>.36***</b>	<b>-.11*</b>	-.02	<b>-.26***</b>	<b>.29***</b>	<b>-.10*</b>	<b>.45***</b>			5.51	1.24
(10) Later Character Judgment	<b>-.19***</b>	<b>-.23***</b>	<b>.23***</b>	<b>.35***</b>	<b>.32***</b>	<b>-.15**</b>	<b>.46***</b>	-.04	-.09		2.57	1.38
(11) Attributions of Duplicity	<b>.34***</b>	<b>.35***</b>	<b>-.14**</b>	<b>-.16**</b>	<b>-.13**</b>	<b>.11*</b>	<b>-.18***</b>	.07	<b>.32***</b>	<b>-.33***</b>	4.47	2.00
* $p < .05$ . ** $p < .01$ . *** $p < .001$ .											<i>Computed correlation using pearson-method.</i>	

*Note.* We measured Sense of Meaning Violation on a 5-point scale, and Morality of Behavior on a 9-point scale. All other measures were measured using a 7-point scale. See supplemental materials for full measures. Significant correlations are bolded.

As seen in Table 2.4, participants reported that these experiences somewhat violated their sense of meaning and elicited moderate levels of negative affect. The degree to which the experience violated participants' sense of meaning correlated positively with the extent to which participants experienced negative emotions.

Within the negative emotions participants reported experiencing, we used multilevel regression analyses to predict whether significant differences existed in the degree to which participants reported feeling different types of emotions. We used type of emotion to predict the degree of negative affect experienced, and nested the analysis within participants. This analysis revealed a significant effect of type of emotion ( $b = .39$ , 95% CI [0.34, 0.44],  $p < .001$ ). We used the R package *lsmeans* (Russell, 2016) to conduct Tukey's HSD posthoc tests between types of negative emotions (see Table 2.5). Results revealed that participants felt more frustrated and disgusted than distressed, and more of all three emotions compared to the degree to which they felt blue and anxious. In sum, people who felt as if they may have misjudged someone's character experienced somewhat of a threat to meaning, felt moderate levels of negative affect, and felt especially frustrated and disgusted.

Table 2.5. Posthoc Comparisons of Types of Negative Affect

Emotion	Mean	SD	Tukey HSD Comparisons			
			(1)	(2)	(3)	(4)
(1) Blue	4.09	2.05				
(2) Anxious	4.23	1.91	.687			
(3) Distressed	4.62	1.73	<.001	.003		
(4) Frustrated	5.27	2.03	<.001	<.001	<.001	
(5) Disgusted	5.51	1.83	<.001	<.001	<.001	.167

*Note.* All negative affect measures were measured on a 7-point scale.

We also tested whether misperception experiences affected participants' broader social beliefs. In conducting the study, we had measured participants' social beliefs from the state of mind they held at Time 2 (during the experience) and at Time 3 (after the experience). However, we chose to focus analyses on participants' Time 2 measures, as the majority of these experiences were years old, and participants' Time 3 recollections may have represented their views of the world years after the experience.

Table 2.6 presents comparisons between participants' scores at Time 1 and Time 2 on these measures. As expected, participants reported that they felt less confident in their ability to judge people's character during these experiences (at Time 2). In analyzing the other exploratory measures of social beliefs, we found participants also held more negative impressions of people in general and less belief in the world as predictable during these experiences (at Time 2).

Table 2.6. Descriptive Statistics for Social Belief Measures at Time 1 and Time 2

	Time 1 <i>M (SD)</i>	Time 2 <i>M (SD)</i>	Difference <i>d (p-value)</i>	Difference Score <i>M (SD)</i>
Confidence Judging Others' Character	5.46 (1.00)	3.75 (1.67)	0.92 (< .001)	1.69 (1.85)
Impressions of People	6.35 (1.56)	4.32 (1.97)	0.87 (< .001)	2.03 (2.32)
Predictable World Beliefs	4.71 (1.35)	3.52 (1.39)	0.75 (< .001)	1.19 (1.59)

*Note.* All social belief measures were measured on a 7-point scale.

We were further interested in whether misperception experiences affected all three types of social beliefs equally, or whether participants exhibited more of a change in any one of these outcomes. To investigate this, we created change variables for participants' (1) decrease in confidence judging others from Time 1 to Time 2, (2) decrease in impressions of people from

Time 1 to Time 2, and (3) decrease in views of the world as predictable from Time 1 to Time 2. We created a new variable to capture scores from all three change variables, and created dummy codes for each of the three types of social beliefs measures. We then ran a multilevel model predicting change in social beliefs using dummy codes for each type of social belief, and nested this model within participants. This analysis revealed that participants decreased most in their impressions of people, more than they decreased in their confidence judging others ( $b = .34$ , 95% CI [0.06, 0.61],  $p = .019$ ), and more than the decrease in their predictable world beliefs ( $b = .84$ , 95% CI [0.56, 1.12],  $p < .001$ ). Moreover, people decreased more in their confidence judging others than they did in their predictable world beliefs ( $b = .50$ , 95% CI [0.22, 0.78],  $p < .001$ ). In sum, people reported greatest decreases in their impressions of people, followed by their confidence judging others, and followed last by their views of the world as predictable.

### **2.2.2.3 The Role of Inconsistency of Behavior in Predicting Consequences**

We proposed that any experience in which participants doubted their impression of someone's moral character should threaten their sense of meaning. However, we were also interested in whether the degree of inconsistency between the targets' actions and perceivers' initial impressions of them predicted differences in the degree to which perceivers felt these affective, motivational, and cognitive consequences. Table 2.7 presents the results of these analyses.

Table 2.7. Inconsistency of Behavior Predicting Consequences of Misperceptions

	Sense of Meaning Violation		Negative Affect		Confidence Judging Others (Time 2) <sup>1</sup>		Impressions of People (Time 2) <sup>2</sup>		Predictable World Beliefs (Time 2) <sup>3</sup>	
	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$
Inconsistency of Behavior	<b>.13 [0.03, 0.23]</b>	<b>.013</b>	<b>.13 [0.03, 0.23]</b>	<b>.012</b>	<b>-.12 [-0.22, -0.01]</b>	<b>.029</b>	-.08 [-0.18, 0.03]	.144	<b>-.15 [-0.24, -0.05]</b>	<b>.003</b>
$R^2 / R^2_{\text{adj}}$	<b>.02/.01</b>		<b>.02/.01</b>		<b>.03/.02</b>		.03/.02		<b>.13/.12</b>	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

<sup>1</sup> This analysis controls for participants' confidence judging others' character at Time 1. Without controlling for this covariate, behavioral inconsistency does not significantly predict confidence judging others' character at Time 2 ( $\beta = -.08$ , 95% CI [-0.18, 0.02],  $p = .118$ ).

<sup>2</sup> This analysis controls for participants' impressions of people at Time 1. Conducting the analysis without controlling for this covariate does not change interpretations ( $\beta = -.06$ , 95% CI [-0.16, 0.04],  $p = .242$ ).

<sup>3</sup> This analysis controls for participants' impressions of people at Time 1. Without controlling for this covariate, behavioral inconsistency still weakly predicts having lower views of the world as predictable at Time 2 ( $\beta = -.12$ , 95% CI [-0.22, -0.01],  $p = .025$ ).

As seen in Table 2.7, the inconsistency of the target's behavior predicted the participant experiencing greater meaning violation and negative affect. Out of the five negative affect measures, however, behavioral inconsistency only predicted feeling blue ( $\beta = .13$ , 95% CI [0.02, 0.23],  $p = .016$ ) and feeling disgusted ( $\beta = .25$ , 95% CI [0.15, 0.35],  $p < .001$ ). Despite the fact that people reported feeling greater frustration and distress during misperception experiences than they did blue, the target's inconsistency did not predict these other negative emotions.

Regarding the effects on perceivers' broader social judgments, the inconsistency of the target's behavior predicted decreased confidence judging others' character at Time 2 and decreased beliefs in the world as a predictable place at Time 2. These analyses controlled for variance in participants' social belief scores at Time 1. However, the inconsistency of the target's behavior did not predict having more negative impressions of people during this time (controlling for participants' baseline impressions at Time 1), even though participants reported dropping the most in this domain during the misperception experience. Exploratory regression analyses did not reveal any interactions between the degree to which behavioral inconsistency predicted lower confidence judging others and lower predictable world beliefs, suggesting that the inconsistency of the target's behavior impacted these domains to the same degree ( $p > .25$ ).

#### **2.2.2.3.1 Exploring the Relationship Between Inconsistency of Behavior and Social Beliefs**

We were additionally interested in whether the inconsistency of the target's behavior predicted each of these social belief outcomes uniquely, or whether the effects of behavioral inconsistency on one was mediated by its effects on another. We first tested whether behavioral inconsistency predicts each outcome independently. To test this, we ran a regression model predicting behavioral inconsistency from both confidence judging others' character at Time 2 and views of the world as predictable at Time 2. We also included covariates for participants' confidence

judging others' character and predictable world beliefs at Time 1.<sup>4</sup> Results revealed that whereas predictable world beliefs at Time 2 predicted behavioral inconsistency ( $\beta = -.13$ , 95% CI [-0.25, -0.01],  $p = .031$ ), confidence judging others' character at Time 2 did not ( $p > .250$ ).

We therefore ran an exploratory mediation model with behavioral inconsistency predicting confidence judging others' character at Time 2, mediated by participants' predictable world beliefs at Time 2. We again included participants' scores at Time 1 as covariates.<sup>5</sup> Results revealed a significant indirect effect ( $\beta = -.07$ , 95% CI [-0.14, -0.02],  $p < .001$ ), such that behavioral inconsistency predicted lower predictable world beliefs at Time 2 ( $\beta = -0.15$ , 95% CI [-0.25, -0.05],  $p = .003$ ), which predicted lower confidence judging others' character at Time 2 ( $\beta = .51$ , 95% CI [0.41, 0.60],  $p < .001$ ). The reverse mediation model, with lower confidence judging others' character as the mediator, was not significant ( $p = 1.00$ ). Taken together, the results implied that perceiving the target's behavior as inconsistent led to seeing the world as more unpredictable, which then led to feeling less confident making judgments about others' character.

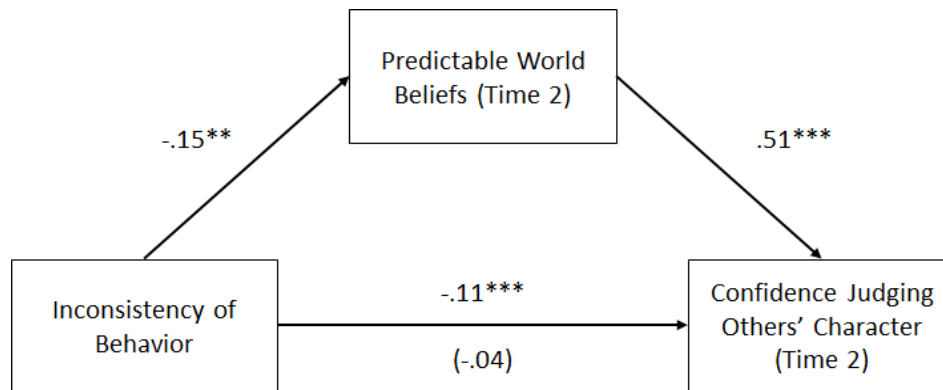
Figure 2.1. Indirect Effect of Inconsistency of Behavior on Confidence Judging Others' Character (Time 2) through Predictable World Beliefs (Time 2)

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<sup>4</sup> Without controlling for these covariates, predictable world beliefs at Time 2 marginally predict behavioral inconsistency ( $\beta = -.10$ , 95% CI [-0.21, 0.01],  $p = .086$ ), whereas confidence judging others' character at Time 2 still does not ( $p = .537$ ).

<sup>5</sup> Without controlling for these covariates, there is still a marginal indirect effect of the mediation model ( $ab$ :  $\beta = -.05$ , 95% CI [-0.10, 0.00],  $p = .060$ ).





*Note.* All paths control for Predictable World Beliefs (Time 1) and Confidence Judging Others' Character (Time 1). Coefficients in the model represent standard coefficients.

#### 2.2.2.4 Interactions between Inconsistency and Morality of Behavior

We conducted exploratory analyses to determine whether the effects of behavioral inconsistency interacted with how immoral the target's actions seemed. The morality of the target's behavior was negatively correlated with inconsistency of the target's behavior ( $r = -.21, p < .001$ ). In other words, the more immoral the target's actions seemed, the more inconsistent they also appeared. However, we were interested in whether outcomes were worse when both behavioral inconsistency and immorality were high, and whether each predictor had unique effects on participants' emotional, motivational, and cognitive states when controlling for the other.

Table 2.8. Inconsistency and Morality of Behavior Predicting Consequences of Misperceptions

	Meaning Violation		Negative Affect		Confidence Judging Others (Time 2) <sup>6</sup>		Impressions of People (Time 2) <sup>7</sup>		Predictable World Beliefs (Time 2) <sup>8</sup>	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Intercept	.02		.03		-.01		-.02		-.03	
Inconsistency of Behavior	<b>.12 [0.02, 0.22]</b>	<b>.024</b>	.08 [-0.02, 0.18]	.125	-.08 [-0.19, 0.02]	.129	-.02 [-0.12, 0.08]	.671	-.09 [-0.19, 0.00]	.054
Morality of Behavior	-0.03 [-0.13, 0.08]	.596	<b>-.22 [-0.32, -0.12]</b>	<b>&lt;.001</b>	<b>.17 [0.06, 0.27]</b>	<b>.001</b>	<b>.22 [0.12, 0.32]</b>	<b>&lt;.001</b>	<b>.22 [0.13, 0.32]</b>	<b>&lt;.001</b>
Inconsistency of Behavior x Morality of Behavior	.06 [-0.03, 0.16]	.197	<b>.12 [0.03, 0.21]</b>	<b>.012</b>	-.04 [-0.14, 0.05]	.405	<b>-.09 [-0.18, -0.00]</b>	<b>.048</b>	<b>-.15 [-0.24, -0.06]</b>	<b>&lt;.001</b>
$R^2$ / $R^2_{adj}$	.02/.01		.08/.07		.05/.04		.08/.07		.19/.19	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

<sup>6</sup> This analysis controls for confidence judging others' character at Time 1. Excluding the covariate does not change interpretation of the results (Inconsistency of Behavior:  $\beta = -.05$ , 95% CI [-0.15, 0.06],  $p = .38$ , Morality of Behavior ( $\beta = .16$ , 95% CI [0.06, 0.26],  $p = .002$ ), and Inconsistency of Behavior x Morality of Behavior ( $\beta = -.04$ , 95% CI [-0.13, 0.06],  $p = .451$ ).

<sup>7</sup> This analysis controls for impressions of people at Time 1. Excluding the covariate does not change interpretation of the results (Inconsistency of Behavior:  $\beta = -.01$ , 95% CI [-0.11, 0.10],  $p = .904$ , Morality of Behavior:  $\beta = .24$ , 95% CI [0.14, 0.34],  $p < .001$ , Inconsistency of Behavior x Morality of Behavior ( $\beta = -.09$ , 95% CI [-0.19, 0.00],  $p = .051$ ).

<sup>8</sup> This analysis controls for views of the world as predictable at Time 1. Excluding the covariate does not change the interpretation of the results (Inconsistency of Behavior:  $\beta = -.05$ , 95% CI [-0.15, 0.04],  $p = .279$ , Morality of Behavior:  $\beta = .26$ , 95% CI [0.16, 0.36],  $p < .001$ , and Inconsistency of Behavior x Morality of Behavior:  $\beta = -.15$ , 95% CI [-0.24, -0.06],  $p = .002$ ).

Table 2.9. Inconsistency and Morality of Behavior Predicting Different Types of Negative Affect

	Blue		Anxious		Distressed		Frustrated		Disgusted	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Intercept	.03		.02		.01		.02		.01	
Inconsistency of Behavior	.10 [-0.00, 0.20]	.058	-.01 [-0.11, 0.09]	.855	.01 [-0.10, 0.11]	.897	.02 [-0.08, 0.13]	.661	<b>.17 [0.08, 0.27]</b>	<b>&lt;.001</b>
Morality of Behavior	-0.09 [-0.20, 0.00]	.059	-.08 [-0.18, -0.03]	<.152	<b>-.20 [-0.30, -0.09]</b>	<b>&lt;.001</b>	-.09 [-0.20, 0.01]	.078	<b>-.34 [-0.44, -0.24]</b>	<b>&lt;.001</b>
Inconsistency of Behavior x Morality of Behavior	<b>.12 [-0.03, 0.22]</b>	<b>.012</b>	<b>.11 [0.01, 0.20]</b>	<b>.033</b>	.03 [-0.06, 0.13]	.474	<b>.12 [0.02, 0.21]</b>	<b>.019</b>	.07 [-0.02, 0.15]	.147
$R^2$ / $R^2_{adj}$	.04/.03		.02/.01		.05/.04		.02/.02		.19/.19	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

As can be seen in Table 2.8, there was no interaction between the inconsistency and morality of the target's behavior in predicting sense of meaning violation. Furthermore, the effect of behavioral inconsistency on sense of meaning violation was robust even when controlling for the morality of the behavior.

However, both predictors interacted to predict feeling more negative affect. To investigate the effects on different types of negative affect, we further conducted individual regression analyses predicting each of the five types of negative affect. As can be seen in Table 2.9, the inconsistency and morality of the target's actions interacted to predict feeling more blue, anxious, and frustrated. The more the target acted inconsistently and immorally, the more participants felt these emotions. Aside from these interactions, it is notable that there was still a marginal main effect of behavioral inconsistency on feeling blue and a significant effect on feeling disgusted, even when controlling for how immoral the target acted. The immorality of the behavior, on the other hand, uniquely predicts feeling distressed and disgusted.

When predicting participants' social beliefs during the experience, analyses revealed that the inconsistency and morality of the behavior interacted to predict having more negative impressions of people and viewing the world as more unpredictable at Time 2. Moreover, as can be seen in Table 2.8, behavioral inconsistency did not uniquely predict any of these three social belief outcomes. In contrast, all three effects appear driven by the how immoral the target's behavior seemed. Despite the fact that behavioral inconsistency uniquely predicted a greater sense of meaning violation even when controlling for the immorality of the target's behavior, these results suggest that mere inconsistency without immoral behavior does not affect participants' broader judgments of others. Instead, the driving factor appears to be the immorality of the target's behavior.

## **2.2.2.5 The Role of Impression Confidence and Importance**

### **2.2.2.5.1 Role in Predicting Consequences of Misperceptions**

We predicted that being more confident about one's initial impressions of the target, and viewing these impressions as more important, would amplify the negative effects of misperceptions.

Table 2.10 presents the regression analyses using impression confidence as a predictor of these negative effects and Table 2.11 presents the regression analyses using impression importance.

As can be seen in Table 2.10, initial impression confidence predicted experiencing more negative affect during this experience, such that the more confident participants initially were in their impressions of the target, the more negative they felt during these misperception experiences. We further conducted individual regression analyses to determine how initial impression confidence predicted different types of negative affect (see Table 2.11). Out of the five negative affect measures, initial impression confidence specifically predicted feeling, distressed, and disgusted. Initial impression confidence did not predict any other outcomes of misperceptions.

Table 2.10. Impression Confidence (Time 1) Predicting Consequences of Misperceptions

	Meaning Violation		Negative Affect		Confidence Judging Others (Time 2) <sup>9</sup>		Impressions of People (Time 2) <sup>10</sup>		Predictable World Beliefs (Time 2) <sup>11</sup>	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Impression Confidence	.09 [-0.01, 0.19]	.075	<b>.15 [0.05, 0.25]</b>	<b>.004</b>	-.02 [-0.14, 0.10]	.693	.03 [-0.17, 0.23]	.771	-.05 [-0.19, 0.08]	.433
$R^2 / R^2_{\text{adj}}$	.01/.01		<b>.02/.02</b>		.01/.01		.02/.02		.11/.10	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

Table 2.11. Impression Confidence (Time 1) Predicting Specific Types of Negative Affect

	Blue		Anxious		Distressed		Frustrated		Disgusted	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Impression Importance	<b>.19 [0.09, 0.29]</b>	<b>&lt; .001</b>	.05 [-0.05, 0.15]	.346	<b>.13 [0.02, 0.23]</b>	<b>.016</b>	.56 [-0.05, 0.16]	.281	<b>.12 [0.02, 0.22]</b>	<b>.022</b>
$R^2 / R^2_{\text{adj}}$	<b>.03/.03</b>		.00/.00		<b>.02/.01</b>		.00/.00		<b>.01/.01</b>	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

<sup>9</sup> This analysis controls for participants' confidence judging others' character at Time 1. Excluding this covariate does not change interpretations of the results ( $\beta = .03$ , 95% CI [-0.07, 0.13],  $p = .537$ ).

<sup>10</sup> This analysis controls for participants' impressions of people at Time 1. Excluding this covariate does not change interpretations of the results ( $\beta = .09$ , 95% CI [-0.11, 0.29],  $p = .366$ ).

<sup>11</sup> This analysis controls for predictable world beliefs at Time 1. Excluding this covariate does not change interpretations of the results ( $\beta = .01$ , 95% CI [-0.13, 0.15],  $p = .877$ ).

Table 2.12. Impression Importance (Time 1) Predicting Consequences of Misperceptions

	Meaning Violation		Negative Affect		Confidence Judging Others (Time 2) <sup>12</sup>		Impressions of People (Time 2) <sup>13</sup>		Views of World as Predictable (Time 2) <sup>14</sup>	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Impression Importance	<b>.31 [0.22, 0.41]</b>	<b>&lt;.001</b>	<b>.36 [0.27, 0.46]</b>	<b>&lt;.001</b>	<b>-.15 [-0.26, -0.05]</b>	<b>.005</b>	-.05 [-0.25, 0.15]	.617	<b>-.17 [-0.31, -0.04]</b>	<b>.012</b>
$R^2 / R^2_{adj}$	<b>.10/.10</b>		<b>.13/.13</b>		<b>.03/.03</b>		.02/.02		<b>.12/.12</b>	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval

Table 2.13. Impression Importance (Time 1) Predicting Specific Types of Negative Affect

	Blue		Anxious		Distressed		Frustrated		Disgusted	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Impression Importance	<b>.34 [0.24, 0.44]</b>	<b>&lt; .001</b>	<b>.31 [0.21, 0.41]</b>	<b>&lt; .001</b>	<b>.27 [0.18, 0.37]</b>	<b>&lt; .001</b>	<b>.20 [0.10, 0.30]</b>	<b>&lt; .001</b>	<b>.19 [0.09, 0.29]</b>	<b>&lt; .001</b>
$R^2 / R^2_{adj}$	<b>.12/.11</b>		<b>.09/.09</b>		<b>.08/.07</b>		<b>.04/.04</b>		<b>.04/.04</b>	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

<sup>12</sup> This analysis controls for participants' confidence judging others' character at time 1. Excluding this covariate does not change interpretations of the results, although the effect is comparatively weaker ( $\beta = -.11$ , 95% CI [-0.21, .00],  $p = .042$ ).

<sup>13</sup> This analysis controls for participants' impressions of people at Time 1. Excluding this covariate does not change interpretations of the results ( $\beta = -.03$ , 95% CI [-0.23, .17],  $p = .757$ ).

<sup>14</sup> This analysis controls for participants' views of the world as predictable at Time 1. Excluding this covariate does change the interpretations of the results ( $\beta = -.10$ , 95% CI [-0.24, 0.05],  $p = .184$ ).

On the other hand, as can be seen in Table 2.12, initial impression importance predicted nearly all of these dependent variables. The more important participants felt it was to be right about the target, the more this experience threatened their sense of meaning and the more negative affect they experienced. When conducting individual regression analyses on different types of negative emotion, we found that impression importance predicted all five negative emotions. Table 2.13 presents the results of these analyses.

Moreover, initial impression importance predicted lower confidence judging others' character (controlling for participants' Time 1 scores), and lower views of the world as predictable (controlling for participants' Time 1 scores). Impression importance did not predict having more negative impressions of people at Time 2 (controlling for participants' Time 1 scores), and this may be because impressions of people are more strongly associated with the immorality of the target's actions rather than the inconsistency between the target's actions and the initial impression. In sum, although initial impression confidence at Time 1 predicted experiencing more negative affect during this experience, initial impression importance appeared to be a stronger predictor of more negative and impactful experiences.

#### **2.2.2.5.2 Role in Predicting Later Judgments**

We also explored whether initial impression confidence and impression importance at Time 1 predicted differences in participants' later judgments of the target's character. That is, we explored whether participants' initial confidence and investment in the accuracy of their impression predicted how negatively they viewed the target after this event passed. We specifically examined three dependent variables: (1) attributing duplicity to the target (Time 2), (2) later character judgments of the target (Time 3), and (3) later blame of the target (Time 3).



Being more confident of one's impressions at Time 1 did not predict attributing duplicity to the target ( $\beta = .07$ , 95% CI [-0.03, 0.17],  $p = .167$ ). However, the participant's Time 1 impression confidence marginally predicted how negatively they judged the target at Time 3, controlling for their initial judgments at Time 1<sup>15</sup> ( $\beta = -.16$ , 95% CI [-0.34, 0.01],  $p = .072$ ). The participant's Time 1 confidence also predicted blaming the individual more at Time 3 ( $\beta = .21$ , 95% CI [0.07, 0.34],  $p = .002$ ).

On the other hand, the importance of the impression to the participant did significantly predict judging the target as more duplicitous ( $\beta = .32$ , 95% CI [0.22, 0.41],  $p < .001$ ). Furthermore, viewing the impression as more important at Time 1 predicted judging the target's character more harshly at Time 3<sup>16</sup> ( $\beta = -.17$ , 95% CI [-0.32, -0.02],  $p = .026$ ), and blaming the target more at Time 3 ( $\beta = .15$ , 95% CI [0.01, 0.28],  $p = .033$ ). In sum, the more important the initial impression was to the participant, the more negatively the participant came to see the target after learning new immoral information about them.

#### **2.2.2.6 Exploratory Mediation Models Predicting Later Judgments**

Finally, we conducted exploratory mediation analyses to test whether impression importance predicts harsher later judgments due to the increased threat this experience posed for meaning. In conducting these mediation models, we focused on predicting later judgments of the target's character (Time 3), with all models controlling for the participants' earlier judgments of the target's character (Time 1). See the supplementary analyses in the Appendix for results of the same models predicting blame at Time 3.

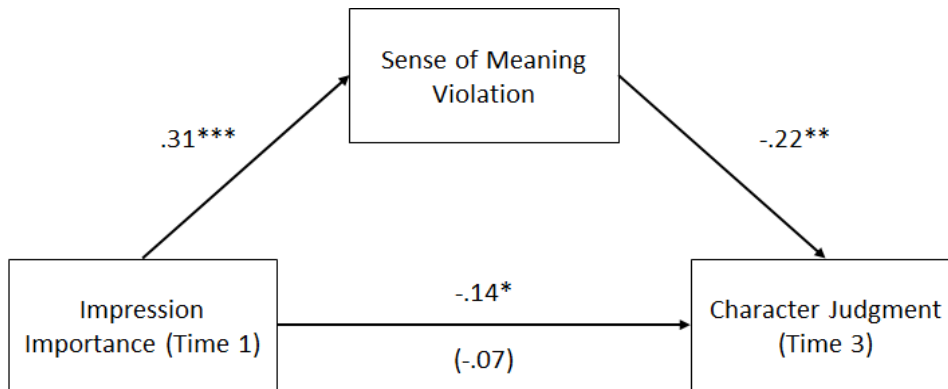
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<sup>15</sup> This analysis controls for participants' character judgments of the target at Time 1. Conducting this analysis without the covariate weakens the relationship between impression confidence and later character judgments ( $\beta = -.06$ , 95% CI [-0.20, 0.08],  $p = .398$ ).

<sup>16</sup> This analysis controls for participants' character judgments of the target at Time 1. Conducting this analysis without the covariate weakens the relationship between impression importance and later character judgments ( $\beta = -.12$ , 95% CI [-0.26, 0.02],  $p = .096$ ).

First, we tested our exploratory hypothesis that initial impression importance would lead to worse later character judgments, mediated by the effect of the misperception on the participant's sense of meaning. We ran a mediation model (model 4 in PROCESS, version 3.0; Hayes, 2017), using a bootstrap estimation approach with 5000 samples. We indeed found an indirect effect of impression importance on later character judgments ( $\beta = -.07$ , 95% CI [-0.12, -0.03],  $p = .004$ , see Figure 2.2)<sup>17</sup>. Impression importance predicted greater sense of meaning violation ( $\beta = .31$ , 95% CI [0.22, 0.41],  $p < .001$ ), which in turn predicted worse later character judgments ( $\beta = -.22$ , 95% CI [-0.34, -0.09],  $p = .001$ ). The more important these impressions were to participants, the more the character revelation threatened participants' sense of meaning. This greater threat then predicted participants judging the target as having worse character.

Figure 2.2. Indirect effect of Impression Importance (Time 1) on Character Judgment (Time 3) through Sense of Meaning Violation

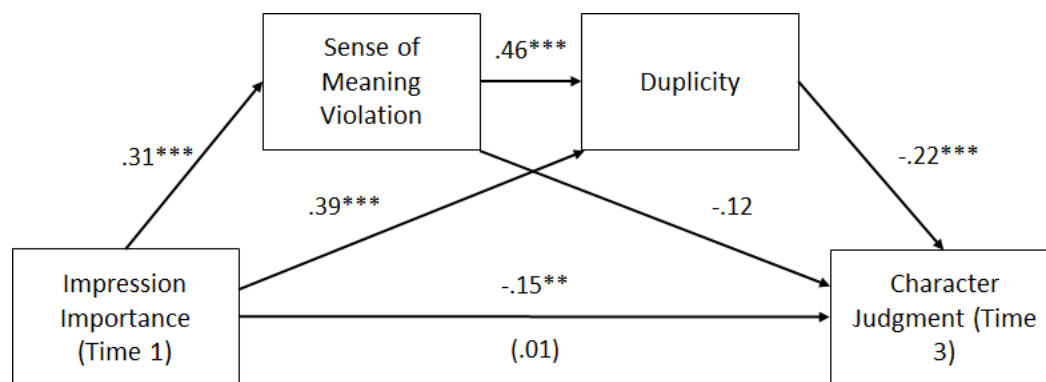


*Note.* All paths control for Character Judgments (Time 1). Coefficients in the model represent standard coefficients.

<sup>17</sup> This analysis controlled for participants' judgments of the target's character at Time 1. Excluding the covariate does not change the interpretation of the results. The indirect effect is still significant:  $\beta = -.06$ , 95% CI [-0.11, -0.02],  $p = .004$ .

We were interested in whether attributions of duplicity played a role in this mediated path. If participants felt a greater sense of threat from having an important impression be violated, this may have motivated them to see the target as being at fault for the misperception, and therefore a worse person. To test this, we ran a serial mediation model (model 6 in PROCESS, version 3.0; Hayes, 2017), which revealed a significant indirect effect ( $\beta = -.03$ , 95% CI [-0.06, -0.01],  $p = .002$ , see Figure 2.3)<sup>18</sup>. Initial impression importance predicted greater sense of meaning violation ( $\beta = .31$ , 95 % CI [0.21, 0.41],  $p < .001$ ), which predicted attributions of duplicity ( $\beta = .46$ , 95% CI [0.28, 0.63],  $p < .001$ ). Attributions of duplicity then predicted later character judgments ( $\beta = -.22$ , 95% CI [-0.29, -0.14],  $p < .001$ ). Taken together, the current findings are in line with viewing initial impression importance as driving harsher later judgments of the target's duplicitous intentions and character.

Figure 2.3. Indirect effect of Impression Importance (Time 1) on Character Judgment (Time 3) through Sense of Meaning Violation and Duplicity



*Note.* All paths control for Character Judgments (Time 1). Coefficients in the model represent standard coefficients.

<sup>18</sup> This analysis controlled for participants' judgments of the target's character at Time 1. Excluding the covariate does not change the interpretation of the results. The indirect effect is still significant:  $\beta = -.03$ , 95% CI [-0.06, -0.01],  $p = .018$ .

### **2.2.3 Discussion**

In line with our predictions, participants in Study 1 reported that their past experiences of misjudging character moderately violated their sense of meaning and resulted in negative emotion. Moreover, during the time that participants felt they had misjudged the target individual, they felt less confident in their ability to judge whether other people were good or not, felt that people in general were more immoral, and felt that the world was less predictable, fair, and safe. Furthermore, the more inconsistent targets seemed from perceivers' previous impressions of them, the more perceivers tended to feel these negative effects. This research demonstrates that the effects of misjudging one person's character can generalize to heighten uncertainty around our judgments of other people as well.

We also predicted that the effects of misperceptions should be greater and more negative for those participants who were more confident in their initial impressions of the target, and who viewed these impressions as being more important to get right. Although we expected both initial impression confidence and importance to predict more negative emotional, motivational, and cognitive consequences for perceivers, impression importance emerged as the more significant predictor of the two. Participants who felt it was more important for their impressions to be accurate, and felt that it was more important for the target to be a good person, felt particularly upset and threatened compared to participants who viewed the impressions to be less important. Moreover, the importance of these impressions predicted attributing more duplicitous intentions to the target, judging the target to be a worse person, and blaming the target more.

Finally, we found evidence of a mediated pathway between initial impression importance and later negative judgments of the target's character. Specifically, how important the impression was to the participant predicted how much this experience violated their sense of meaning, which

then predicted attributing more duplicity to the target. The more participants saw the target as intentionally deceptive, the worse they came to judge the target's character.

In sum, findings suggest that character revelations are epistemologically disorienting, the effects of which may be remembered years later. The results of the study corroborated our predictions regarding the affective, motivational, and cognitive consequences of these experiences. To our knowledge, this is the first research examining how violations of impressions affect sense of meaning. Moreover, this is the first research investigating why apparent misperceptions of moral character are aversive, and how they affect perceivers' broader judgments of others. In doing so, this research highlights the importance that moral character perceptions play in our daily lives.

#### **2.3.3.1 Emotional Profile of Misperceptions of Character**

Although misperceptions were associated negative affect in general, different types of emotions appeared to play unique roles in the experience. We predicted that people would feel increased anxiety during these experiences, as anxiety has been linked to uncertainty (e.g., Gao & Gudykunst, 1990), cognitive dissonance (Elliot & Devine, 1994), and meaning threats (Kelly, 1955; Greenberg, Martens, Jonas, Eisenstadt, Pyszczynski, & Solomon, 2003; Proulx & Heine, 2008). We also predicted that people would feel disgust during these experiences, as disgust is involved in moral judgments (for a review, Pizarro, Inbar, & Helion, 2011) and reflects avoidance motivations (Oaten, Stevenson, & Case, 2009). When witnessing someone's immoral side, people may feel a sense of disgust both because of the individual's immorality as well the desire to avoid someone they have perhaps drawn close to.

Disgust was indeed a prominent emotion during this experience, and was the most strongly appraised emotion. Moreover, both the inconsistency of the target's behavior as well as

the immorality of their behavior had unique effects in predicting disgust. Although disgust is a well-known moral emotion (Pizarro, Inbar, & Helion, 2011), the association with inconsistency suggests that people may feel averse to or wish to avoid two-faced people in general. Future research should explore related avoidance motivations and what type of inconsistent behaviors incur more disgust.

On the other hand, anxiety did not appear to play a prominent role in this experience. Anxiety was one of the least appraised negative emotions. Furthermore, although behavioral inconsistency interacted with the target's immoral actions to predict heightened anxiety, anxiety was the only emotion that was not predicted by either behavioral inconsistency or immorality alone. One possibility for the weaker presence of anxiety is that participants may be less apt at recalling their experience of this emotion compared to others. However, more research ought to be conducted to investigate this possibility, and to understand whether perceivers do feel anxiety during apparent misperceptions of character.

Finally, although participants reported feeling the least blue or sad during this experience compared to the degree they felt other emotions, they did report feeling more blue when targets were acting more inconsistently. Moreover, participants felt most sad when the target was acting both inconsistently and immorally. Although sadness is not an emotion typically linked to cognitive dissonance or meaning violations, depression is related to feeling a loss of perceived control and order (Gleicher & Weary, 1991). Moreover, it's possible that sadness may be a hallmark of the disillusionment participants may feel when realizing that someone is not as moral or admirable as they previously thought. This finding suggests an interesting avenue for future research into disillusionment and depression.

### **2.3.3.2 How Misperceptions Threaten Meaning**

In the present research, we investigated whether misperceptions would lower participants' confidence in their ability to judge others, thus making them feel their meaning frameworks are less reliable. We also explored other ways in which the effects of misperceptions may generalize and color their broader views. Participants in our study reported a decrease in all three of social belief outcome measures; following misperceptions, they were less confident in their judgments of others, expected people to be more immoral, and felt that the world was less predictable.

Because our study measured all three outcome variables retrospectively, it is difficult to disentangle which outcomes precede others, and which are more central to the experience of a misperception. However, people appear to drop the most in their views of others' morality compared to their confidence in their judgments and how predictable the world seems. Part of this larger drop may reflect differences in participants' baseline scores before the experience, as participants reported fairly positive impressions of people in general before the experience.

That being said, these outcomes were associated with different predictors. The inconsistency of the target's actions from their presupposed character predicted perceivers feeling less confident in making judgments about others and feeling like the world is less predictable. Conversely, the inconsistency of the target's actions did not affect the perceiver's impressions of people in general.

When incorporating the role of how immoral the target acted, we find that the immorality of the target's actions uniquely predicts decreases in all three of these social belief outcomes, whereas behavioral inconsistency does not. In other words, the more immoral the target acted, the worse participants felt in all three social belief domains, over and above the role of merely witnessing inconsistency. Furthermore, the immorality of the target's actions interacts with

behavioral inconsistency to predict seeing people as less moral and the world as less predictable. However, since all participants in this study reported on the immoral behaviors of someone they thought was a good person, the role of perceived immorality cannot be completely disentangled from the effects of witnessing inconsistent behavior. In Study 2, we investigate the differential effects of learning about a misperception and simply learning about immoral behavior in order to clarify which exerts unique effects on eliciting these negative consequences.

### **2.3.3.2 How Misperceptions Affect Impression Updating**

As discussed above, we found that impression importance predicted the degree to which participants updated their later impressions of the target's character. We specifically found that impression importance predicted more of a meaning threat, which lead participants to attribute more duplicitous intentions to the target and therefore worse moral character.

One interpretation of this pattern is that the participants who viewed the impression as important were also the ones who were given more reason to trust the target. In these cases, given that the targets seemed more aware of the impression they were giving off, they may logically have appeared more duplicitous and as having worse character. At the same time, MMM provides another plausible interpretation of these findings (Heine, Proulx, & Vohs, 2006). Participants who valued these impressions more may have consequently felt more threatened by the error these misperceptions presented. This may have motivated them to construct meaning out of this unexpected event. Given that misperceptions threaten perceivers' judgments of others, it may have been reassuring to construct an interpretation of the experience as being the solely the target's fault, and to see the target as intentionally manufacturing a false impression. Indeed, person perception is often a motivated process (Klein & Kunda, 1992), and people who experience meaning threats often restore meaning by finding fault in others who commit wrongs



(Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). Future research should explore this interpretation as well as other strategies with which individuals may make meaning following these experiences.

### **2.3 Limitations**

Despite the fact that this study provides initial evidence for our theory, and is informative about factors that moderate these experiences, there are several limitations that need to be addressed in future work.

The most obvious limitation is that this research is retrospective and correlational. The retrospective approach enables us to attain rich data about people's real experiences, particularly those that are impactful and lasting in memory. However, retrospective research suffers from several shortcomings (for a review, see Toftthagen, 2012). Firstly, there may be systematic retrieval biases in the way participants recall their experiences, and such biases may impact our interpretation of the data. For instance, participants who were especially surprised by the target's behavior may be retrospectively rating those impressions as being more important to them. Furthermore, there is a possibility that we are merely tapping into participants' lay theories about these experiences. People often explain past mental states based on their theories of cognition rather than based on true introspection (Nisbett & Wilson, 1977). Although such theories are also informative, since they map onto our theoretically derived predictions, it is possible that real occurrences of such events are experienced differently. In future studies, we aim to both monitor participants over time as they encounter these experiences in everyday life. In Chapter 4, we also present experimental research that aims to circumvent this limitation.

Similarly, due to the correlational nature of the study, the current research cannot speak to causal associations or directional relationships. There are therefore several plausible

interpretations of the current findings, as well as the possibility of unknown confounding variables. For instance, participants who came to harsher later judgments of the targets may have simply witnessed objectively more diagnostic behavior. It is also unknown whether the causal factor for these negative outcomes is the experience of misperceiving someone's character, or whether they are due primarily to witnessing immoral behavior. In Chapter 4, we present data from an experimental study that aims to address these limitations and to isolate the causal mechanism of these effects.

There are other important limitations to this first study that affect the interpretations we can draw. The paradigm and measures used in Study 1 prompted participants to focus on the misperception event. Participants may have retrospectively attributed greater importance and impact to the event than they actually experienced at the time. Furthermore, as many of our measures implied that these events may have been negative, the current results may be partly due to demand effects. In Chapter 4, we present research in which we avoid focalizing the misperception in order to obtain less biased measures of the experience. Moreover, to address the demand effects of our questioning, we are currently planning a follow-up study in which participants will first answer neutral open-ended questions regarding their experience of such events. We will then code their responses and also observe whether these open-ended descriptions correlate with their answers on later close-ended questions about their affect and sense of meaning.

Finally, given the retrospective nature of Study 1, participants in this study needed to be able to recall these past experiences. As such, this study likely samples a subset of the possible misperception experiences that people experience in daily life. We are unlikely to have sampled, for instance, experiences in which perceivers assimilated the discrepant behavior into their

previous impression of the target. As such, the findings of this study may represent particularly impactful and negative versions of apparent misperceptions of others, thus biasing our results. In future research, we plan to use alternate paradigms to investigate people's real experiences of misperceptions. For instance, we are currently planning follow-up studies in which we track participants' perceptions of public and political figures over time. Due to the intense scrutiny of such public figures, it is common for them to eventually be caught in media scandals. By following participants over time and measuring their views of these individuals, we will be able to conduct a similar study without needing to resort to a retrospective design.

## **2.4 Future Directions**

The overarching goal of Study 1 was to test our core predictions about the effects of misperceptions using data from people's real past experiences. We aimed to pinpoint correlates of these experiences and model how they related to the various affective, motivational, and cognitive consequences of misjudging character. We also aimed to estimate the prevalence of these experiences and to profile the types of relational contexts in which these experiences took place. The findings from Study 1 corroborated our main predictions, representing a liberal but informative test of our theory.

As discussed above, many of the prominent shortcomings of this first study are addressed by the research in Chapter 3. Furthermore, as mentioned, we are currently conducting a similar follow-up study that aims to (1) replicate current findings, and (2) to measure retrospective memories with fewer demand effects. In this follow-up study, we also have several additional goals. Firstly, we are interested in whether misperceptions are experienced similarly across different types of relational contexts. In the current study, certain relational contexts were underrepresented, such as family relationships and relationships with public figures. Because we

propose that misperceptions are disorienting even when they involve distant individuals like public figures, this follow-up study will sample each of the main relational contexts equally and with high enough power to detect differences between contexts.

Moreover, this follow-up study will use more reliable measures, as many of the measures used in Study 1 were single-item and self-created. Finally, this follow-up study will allow us to engage in more confirmatory analyses, as much of Study 1 was exploratory. Taken together, this planned study will help determine whether individuals report similar negative outcomes even when unprompted by our questioning, and whether these negative outcomes hold across relationship contexts.

Other potential future directions include delving deeper into predictors of when perceivers update their impressions following character revelations of others, and to what extent. Although the current research explored how violations to meaning affected participants' degree of impression updating, the retrospective and correlational nature of this design prevent clear interpretation of what predicts impression revision. Future research should explore when people choose to retain their initial impressions in the face of impression-discrepant information about others, and whether tendencies to do so are predicted by how threatened perceivers feel. Moreover, more systematic investigation is needed to test whether the desire to make meaning indeed drives the extremity of impression-updating following misperceptions. Such future research may illuminate the full range of responses to character revelations, and better map the role that meaning maintenance motivations play during this process.

## **Chapter 3: Misperceiving Character in the Lab**

In Study 1, we investigated the consequences of apparent misperceptions in the context of people's real lives. We further tested whether these consequences were moderated by how certain and important these impressions seemed, and also explored whether these factors predicted how much people changed their impressions of the targets. In Study 2, we complement these findings by investigating whether the negative consequences of misperceptions replicate when participants experience a misperception in the lab. We further attempt to rule out an alternative explanation for these negative effects, and test whether these effects are due to experiencing a misperception or merely due to learning about someone's immoral behavior.

### **3.1 Study 2**

The goal of Study 2 was to replicate the findings of Study 1 in a controlled experimental setting. We adapted previous methodology (Cone & Ferguson, 2015; Rydell, McConnell, Strain, Claypool, & Hugenberg, 2007) to manipulate participants' impressions of a purportedly real target. In doing so, we focused specifically on our core predictions that misperceptions of character elicit a desire to restore sense of meaning, negative affect, and decreased confidence judging others.

In this study, we also assessed an alternative explanation for these negative effects, namely that these consequences stem from learning about immoral behavior in general. We therefore compared whether the effects of learning about a target's immoral behavior differed depending on whether the participant first developed a positive impression or first developed a negative impression of the target. We compared both conditions (the Inconsistent Target and Consistent Target conditions) to a third condition (Control condition) in which participants did not receive a manipulation at all. We hypothesized that participants in the Consistent Target

condition would not feel a sense of meaning threat, and would not feel less confident judging others' character. However, as our findings from Study 1 suggested that target immorality, and not inconsistency, predicts distress and more negative impressions of people, we did not have strong hypotheses for these participants' negative affect and impressions of other people.

Study 2 also differed from Study 1 in three additional ways. First, as the threat to meaning in this study is proximal and not retrospectively recalled, we assessed threat to meaning by measuring immediate desires to restore a sense of meaning. To do this, we measured participants' affirmation of alternate moral values, a common method by which people compensate for lack of meaning (see Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989; Heine, Proulx, Vohs, 2006). Second, we also assessed participants' sense of uncanniness. Uncanniness involves feeling unease, creepiness, and a lack of order, all of which have been linked to the aversive arousal involved with meaning threats (Proulx, Heine, & Vohs, 2010). Finally, we used additional indirect measures of participants' social beliefs with the goal of reducing demand effects in our questioning.

### **3.2.1 Method**

#### **3.2.1.1 Participants**

We recruited participants from the University of British Columbia's human subject pool. The study was advertised to participants as a study about how people form impressions and social judgments in everyday life. A total of 612 students participated in the study, with two participants in the Inconsistent and Consistent Target conditions removed for suspicion. Due to an oversight, we failed to include demographic items. As such, beyond their shared student status, the demographic composition of this sample is unknown.

### **3.2.1.2 Procedure**

At the start of the study, the research assistant assembled all participants present (a maximum of four were run at a time), and explained that the study aimed to explore how people's personality affected the way they formed impressions in everyday life. The research assistant explained that participants would engage in an activity to assess their impressions of others, and that this activity would present them with information about real public figures in Vancouver.

Participants learned that this information was all publicly available, and had been collected through community newspapers and media and assembled into a specific format for the study. They learned that all names had been anonymized. In order to facilitate the deception of this cover story, research assistants further asked if participants would be willing to keep the study information confidential, as the study contained information about real people. Participants then entered separate rooms to begin the study.

At this point, the survey randomly assigned participants to one of three different conditions: the (1) Inconsistent Target condition, (2) Consistent Target condition, and (3) Control condition. Participants in the Inconsistent Target and the Consistent Target conditions first completed a filler personality questionnaire in line with cover story. They then completed the main impression formation activity.

In the Inconsistent Target condition, participants first learned about a target who seemed like a moral person (Time 1). In the Consistent Target condition, participants first learned about a target who seemed like an immoral person (Time 1). In both conditions, participants answered questions about their impressions of the target. Following this short questionnaire, participants in both conditions then read an excerpt of a newspaper describing the target's arrest for extremely immoral behavior (Time 2). Following this activity, participants then filled out

dependent measures assessing their desire for meaning, negative affect, and their broader judgments of others.

Participants in the Control condition, however, did the study in a different order. Upon starting the study, they first filled out all the dependent measures. Their answers on these measures therefore represented control scores to compare the other two conditions to.

Participants in this condition were then also given the impression formation activity, as they had undergone the same cover story as participants in the other conditions. They were randomly assigned to complete the impression formation activity corresponding to either the Consistent Target condition or the Inconsistent Target condition. Their answers in this portion of the study were not included in the analyses.

For the full version of the script and materials used, please see the Appendix.

### **3.2.1.3 Impression Formation Activity**

#### **3.2.1.3.1 Target Profile.**

During the first part of the impression formation activity, participants first read the anonymized target's profile. They were told that this individual (who had been assigned a fake name, "Joseph") had also attended the University of British Columbia, and still lived in Vancouver. They learned that Joseph was a well-known and established businessman in the community, and had a family with two children. At this point, in order to be more convincing, the survey asked participants whether they felt they might personally know this individual, as that would affect our interpretation of their answers in the study.

#### **3.2.1.3.2 Time 1**

In both conditions, participants read a series of eighteen behavioral and descriptive statements about the target. These statements included only information that could plausibly have been



publicly known. In both conditions, the set of statements included twelve morally-relevant pieces of information, and six neutral pieces of information meant to act as filler details. The six neutral pieces of information were interspersed throughout the other twelve. Examples of the filler information include, “Joseph often travelled for business and was commonly out of town,” and “Joseph often visited a local gym on weekends.”

#### **3.2.1.3.2.1 Inconsistent Target Condition**

The twelve statements in this condition presented uniformly moral information about the target’s conduct in the community, both from his role as a father as well as his role as a philanthropic businessman. Example statements include, “Joseph once helped raise money so that a local school could buy more supplies for their students,” and “Joseph often involved his business in local charitable efforts.”

#### **3.2.1.3.2.2 Consistent Target Condition**

The twelve statements in this condition presented uniformly immoral information about the target’s conduct in the community. Although we tried to parallel the statements in the Inconsistent Target Condition, we adapted these statements to make more sense as examples of immoral behavior. Example statements include, “At a time when many local businesses committed to supporting hurricane-relief charities, Joseph’s charities did not,” and “Joseph was once overheard shouting obscenities at neighbourhood children who walked past his house.”

#### **3.2.1.3.3 Time 2**

In both conditions, participants were told that they would learn new and relevant information about the target. They were given an excerpt from a news article that featured the target, with information that the target had been arrested and convicted for several counts of child molestation. We used this type of behavioral information as it has been used in past versions of

this paradigm (Cone & Ferguson, 2015). Furthermore, past research finds that people view such crimes as being highly diagnostic of who an individual is (Strohmingner & Nichols, 2014). Please see the supplementary material in the Appendix for full versions of all materials.

### 3.2.1.4 Measures

Please see the Appendix for descriptive statistics and items for all measures.

#### 3.2.1.4.1 Measures List

Table 3.1. Order of Measures for the Inconsistent Target and Consistent Target Conditions

Time Point	Time 1	Time 2
Measures	<ul style="list-style-type: none"> <li>• Impressions of the Target</li> </ul>	<ul style="list-style-type: none"> <li>• Manipulation Checks</li> <li>• Impressions of the Target</li> <li>• Affective and Motivational Consequences</li> <li>• Social Beliefs</li> </ul>

#### 3.2.1.4.1.1 Manipulation Checks

##### 3.2.1.4.1.1.1 Impression Change

At Time 2, as a manipulation check, we assessed the degree to which the later information changed participants' impressions of the target. We used one item, "To what extent did this later information change your overall impression of Joseph?" Participants answered on a scale from 1 (*not at all*) to 7 (*extremely*).

##### 3.2.1.4.1.2 Impressions of the Target

Participants answered all the below measures at Times 1 and 2.

#### **3.2.1.4.1.2.1 Character Judgment**

At both Times 1 and 2, we used similar measures as in Study 1 to measure character judgments. However, in order to shorten the questionnaire, we used the four items that loaded the most onto this factor in Study 1. Sample items include, “Joseph is a person of strong moral character,” and “I would say that Joseph is a good person.” Scale reliability was good at both Times 1 and 2 ( $\alpha_{\text{Time 1}} = .97$ ,  $\alpha_{\text{Time 2}} = .87$ ).

#### **3.2.1.4.1.2.2 Impression Confidence**

At both Times 1 and 2, we used the same measure as in Study 1 to measure impression confidence.

#### **3.2.1.4.1.2.3 Impression Importance**

At both Times 1 and 2, we used the same two measures as in Study 1 to measure impression importance ( $r_{\text{Time 1}} = .46$ ,  $p < .001$ ;  $r_{\text{Time 2}} = .39$ ,  $p < .001$ ).

#### **3.2.1.4.1.3 Affective and Motivational Consequences**

Participants answered all the below measures at Time 2.

##### **3.2.1.4.1.3.1 Prostitute Bond**

To measure desire to affirm meaning, we first used the most common measure cited in meaning maintenance and terror management literature (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). This measure presents participants with the opportunity to affirm a moral value by giving them the chance to punish someone who has violated moral norms. First, participants read a case brief about an individual who was caught engaging in public prostitution. Participants are then asked to set a bond for the individual, ranging from \$0 to \$999.

### **3.2.1.4.1.3.2 Worldview Affirmation**

Given that people may have diverse views about prostitution, we also included an alternate measure of people's desire to affirm meaning (McGregor, Zanna, Holmes, & Spencer, 2001). In this measure, participants first read two statements that represent two sides of a moral issue, namely, whether or not religious face coverings should or should not be banned from public spaces in Canada. Participants then select one side of this issue, either in support of banning or against banning. Following this selection, participants answer items from three different subscales. The first subscale, conviction, includes four items (e.g., "How firmly do you believe in this position?") ( $\alpha = .95$ ), to which participants answered on a scale from 1 (*not at all*) to 10 (*extremely*). The second subscale, consensus, includes two items (e.g., "What percentage of the general population do you think would mostly agree with this position?") ( $\alpha = .77$ ), to which participants answered on a scale from 1 (*0-10%*) to 10 (*91-100%*). Finally, the third subscale, ambivalence, includes 4 items (e.g., "I find myself being torn between the two sides of the issue.") ( $\alpha = .48$ ), to which participants rated on a scale from 1 (*strongly disagree*) to 10 (*strongly agree*). We averaged the three subscales to form a total score for affirmation (with the ambivalence subscale reverse-coded). This scale had good reliability ( $\alpha = .82$ ).

### **3.2.1.4.1.3.3 Uncanny Measure**

We measured participants' sense of uncanniness by using three items from previous research (Gray & Wegner, 2012;  $\alpha = .65$ ). These three items ask participants to rate the degree they feel "unnerved," "uneasy," and "creeped out," on a scale from 1 (*very slightly or not at all*) to 5 (*extremely*).

#### **3.2.1.4.1.3.4 PANAS**

We measured negative affect using the negative affect subscale of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988;  $\alpha = .87$ ). This subscale asked participants to indicate how much they are currently actively feeling 10 different emotions. Example items include, “distressed,” “upset,” and “afraid.” Participants rated how much they felt each emotion on a scale from 1 (*very slightly or not at all*) to 5 (*extremely*).

#### **3.2.1.4.1.4 Social Beliefs**

##### **3.2.1.4.1.5 Confidence Judging Others’ Character Direct Measure**

To measure participants’ confidence judging others, we used three self-created items ( $\alpha = .84$ ). A sample item is, “How confident are you that your general impressions of other people are correct?”. Participants rated how confident they felt on a scale from 1 (*not at all*) to 7 (*extremely*).

##### **3.2.1.4.1.6 Confidence Judging Others’ Character Indirect Measure**

We also used an alternative measure for participants’ confidence judging others. We showed participants six faces from the Chicago Face Database (Ma, Correll, & Wittenbrink, 2015). We selected two faces that had been rated as appearing high in morality, two which had been rated as appearing low in morality, and two which were rated neutrally. After participants saw each face, they rated the apparent morality of the individual’s face and rated their confidence making this judgment. Participants therefore answered the same item “How confident are you that your impression of this target is correct?” six times ( $\alpha = .93$ ). Participants rated their confidence on a scale from 1 (*extremely unsure*) to 9 (*extremely confident*).

#### **3.2.1.4.1.7 Impressions of People Direct Measure**

To measure participants' impressions of people, we used four items adapted from the items used to measure participants' character judgments of the target ( $\alpha = .83$ ). Sample items include, "Most people have strong moral character," and "Most people treat others fairly." Participants rated these items on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

#### **3.2.1.4.1.8 Impressions of People Indirect Measure**

We also used an alternate measure for participants' impressions of people, based on the ratings participants gave to each of the six faces described above. After participants saw each face, they rated the apparent morality of the individual's face. Participants therefore answered the same item, "How would you rate your impression of this person's character?" six times ( $\alpha = .75$ ). Participants rated their moral impressions of each face on a scale from 1 (*extremely negative*) to 9 (*extremely positive*).

### **3.2.2 Results**

Table 3.2 presents the descriptive statistics for key dependent measures across the three conditions.

Table 3.2. Descriptive Statistics for Key Measures Across Conditions in Study 2

	Inconsistent Target Condition	Consistent Target Condition	Control Condition
<i>n</i>	210	200	200
Prostitution Bond	324.90 (248.40)	363.95 (250.42)	314.64 (247.51)
Worldview Affirmation	6.88 (1.64)	6.88 (1.75)	7.05 (1.73)
Uncanny	2.19 (0.95)	2.09 (0.88)	1.49 (0.50)
Negative Affect	1.57 (0.62)	1.48 (0.57)	1.38 (0.48)
Confidence Judging Others' Character (Direct Measure)	4.26 (1.04)	4.35 (0.98)	4.53 (0.95)
Confidence Judging Others' Character (Indirect Measure)	4.97 (1.56)	4.99 (1.66)	5.35 (1.41)
Impressions of People (Direct Measure)	4.15 (1.09)	4.37 (1.01)	4.37 (0.97)
Impressions of People (Indirect Measure)	5.21 (0.81)	5.37 (0.80)	5.30 (0.80)

*Note.* The Prostitution Bond measure was measured on a scale from 0 to 999. Worldview affirmation was measured on a scale from 1 to 10. The Negative Affect and Uncanny measures were measured on a scale from 1 to 5. The Indirect Measures for Confidence Judging Others' Character and Impressions of People were measured on a scale from 1 to 9. The Direct Measures for each, respectively, were measured on a scale from 1 to 7. See the supplemental materials for full measures.

### 3.2.2.1 Manipulation checks

#### 3.2.2.1.1 Perceptions of the targets before and after

We first checked that participants in the Inconsistent Target condition indeed formed a positive initial impression of the target at Time 1, and a later negative impression of the target at Time 2.

We also tested that participants in the Consistent Target condition formed a negative initial impression of the target at Time 1, followed by a consistently negative impression of the target

Time 2. We first analyzed whether the impressions participants held at Time 1 and Time 2 differed by condition. We conducted multilevel regression analyses predicting character judgments, using an interaction term between time (Time 1 vs. Time 2) and condition (Inconsistent Target vs. Consistent Target condition), and nested this analysis within participants. Results revealed a significant interaction between time and condition ( $b = 2.86$ , 95% CI [2.66, 3.07],  $p < .001$ ), such that the effect of time on character judgments varied depending on the condition participants were in.

We used the R package *lsmeans* (Russell, 2016) to conduct Tukey's HSD posthoc tests on this interaction. Table 3.3 presents these results. Participants in the Inconsistent Target condition indeed rated the target more positively at Time 1 than at Time 2, after they learned the news about the target. Furthermore, as expected, they rated the target more positively at Time 1 compared to how positively participants in the Consistent Target condition rated the target at Time 1.

Notably, however, participants in the Consistent Target condition also exhibited change from Time 1 and Time 2. They rated the target more positively in the first session of the impression-formation activity than they did after learning the news about the target, even though we strove to keep the immorality consistent throughout. Moreover, after participants in both conditions learned the new immoral news about the target, participants in the Inconsistent Target condition still judged the target more positively than participants in the Consistent Target condition.



Table 3.3. Posthoc Comparisons of Character Judgments across Time and Condition

	Tukey HSD Comparisons				
	Mean	<i>SD</i>	(1)	(2)	(3)
(1) Inconsistent Target condition (Time 1)	5.88	0.87			
(2) Inconsistent Target condition (Time 2)	2.24	1.02	<.001		
(3) Consistent Target condition (Time 1)	2.17	0.83	<.001	<.001	
(4) Consistent Target condition (Time 2)	1.40	0.65	<.001	<.001	<.001

*Note.* All negative affect measures were measured on a 7-point scale. The Inconsistent Target condition had  $n = 210$ , and the Consistent Target condition had  $n = 210$ .

### 3.2.2.1.2 Impression change

As expected, participants in the Inconsistent Target condition indeed reported greater impression change ( $M = 5.96$ ,  $SD = 1.23$ ) compared to participants in the Consistent Target condition ( $M = 4.46$ ,  $SD = 1.93$ ) ( $b = -1.49$ , 95% CI [-1.81, -1.18],  $p < .001$ ). Despite this difference, it is notable that the participants in the Inconsistent Target condition still reported above midpoint levels of impression change.

### 3.2.2.2 Meaning Threat

#### 3.2.2.2.1 Prostitute Bond

We first analyzed whether participants in different conditions differed in the punishment they assigned the criminal in the prostitution bond measure. Against predictions, we did not find differences between participants in the Inconsistent Target condition and the Consistent Target condition ( $b = 39.06$ , 95% CI [-9.22, 87.33]  $p = .113$ ), nor between the Inconsistent Target condition and the control condition ( $b = 10.25$ , 95% CI [-38.02, 58.53],  $p = .677$ ). However, participants in the Consistent Target condition set a slightly higher bond than those in the control condition ( $b = 49.31$ , 95% CI [0.45, 98.17],  $p = .048$ ).

#### **3.2.2.2.2 Worldview Affirmation**

When we analyzed our second measure of meaning affirmation, we did not find any significant differences between the three conditions ( $p < .25$ ).

#### **3.2.2.2.3 Uncanny**

We conducted regression analyses to determine whether participants in the Inconsistent Target condition felt more uncanny compared to other participants. Participants in the Inconsistent Target condition indeed experienced more uncanniness compared to those in the control condition ( $b = 0.70$ , 95% CI  $[-0.86, -0.54]$ ,  $p < .001$ ), but did not experience more uncanniness compared to those in the Consistent Target condition ( $b = 0.11$ , 95% CI  $[-0.26, 0.05]$ ,  $p = .186$ ). Participants in the Consistent Target condition also experienced more uncanny feelings than those who did not receive a manipulation ( $b = 0.60$ , 95% CI  $[-0.75, -0.44]$ ,  $p < .001$ ). In sum, both participants who learned about an inconsistently immoral target and a consistently immoral target reported experiencing more uncanniness than participants in the control condition.

#### **3.2.2.3 Negative Affect**

We conducted regression analyses to determine whether negative affect differed across conditions. Participants reported significantly more negative affect in the Inconsistent Target condition compared to the Control condition ( $b = 0.20$ , 95% CI  $[0.09, 0.31]$ ,  $p < .001$ ), and marginally more negative affect than the Consistent Target condition ( $b = 0.10$ ,  $t(607) = 1.73$ ,  $p = .084$ ). Conversely, participants in the Consistent Target condition reported marginally, but not significantly, more negative affect than participants in the Control condition ( $b = 0.10$ , 95% CI  $[-0.01, 0.21]$ ,  $p = .070$ ). Participants who experienced a misperception expressed the most negative affect, followed by those who learned about a consistently immoral target, and followed last by those in the control condition.

#### **3.2.2.4 Broader Social Beliefs**

All analyses in this section were conducted by running regression analyses with condition (dummy-coded) predicting participants' scores on the relevant dependent variable.

##### **3.2.2.4.1 Confidence Judging Others**

###### **3.2.2.4.1.1 Direct Measure.**

Participants in the Inconsistent Target condition indeed reported lower confidence judging others compared to those who did not receive a manipulation ( $b = 0.27$ , 95% CI [-0.46, -0.08],  $p = .006$ ). However, they did not significantly differ from participants in the Consistent Target condition ( $b = 0.09$ , 95% CI [-0.10, 0.29],  $p = .335$ ), although these results trended in the predicted direction. Participants in the Consistent Target condition, however, reported only marginally less confidence judging character than those who did not receive a manipulation ( $b = 0.18$ , 95% CI [-0.02, 0.37],  $p = .076$ ).

###### **3.2.2.4.1.2 Indirect Measure**

Participants in the Inconsistent Target condition indeed reported lower confidence judging strangers' faces than those who did not receive a manipulation ( $b = -0.39$ , 95% CI [-0.69, -0.09],  $p = .011$ ). Similar to the above trends, participants in the Consistent Target condition also reported lower confidence compared to those who did not receive a manipulation ( $b = -0.37$ , 95% CI [-0.67, -0.06],  $p = .018$ ). Participants in the Inconsistent Target condition did not differ from participants in the Consistent Target condition ( $b = 0.02$ , 95% CI [-0.32, 0.29],  $p = .888$ ). In sum, both participants who learned about an inconsistently immoral target and those who learned about a consistently immoral target were less confident making judgments about strangers' faces, compared to participants who did not undergo a manipulation.

#### **3.2.2.4.2 Impressions of People**

##### **3.2.2.4.2.1 Direct Measure**

As predicted, participants in the Inconsistent Target condition rated people as less moral than those who did not receive a manipulation did ( $b = -0.22$ , 95% CI  $[-0.42, -0.02]$ ,  $p = .031$ ), and those in the Consistent Target condition did ( $b = -0.22$ , 95% CI  $[-0.42, -0.02]$ ,  $p = .031$ ). There was no difference between the Consistent Target and the control condition ( $p = 1.00$ ).

##### **3.2.2.4.2.2 Indirect Measure**

There was no difference between how participants in the Inconsistent Target condition and the control condition rated faces; there was also no difference between how participants in the Consistent Target condition and the control condition rated faces ( $p > .250$ ). However, there was a weak effect such that participants in the Inconsistent Target condition judged the faces to be generally less moral than how participants in the Consistent Target condition judged them ( $b = -0.16$ , 95% CI  $[-0.31, -0.001]$ ,  $p = .048$ ). In sum, the only difference that emerged between conditions was a weak effect such that participants who misperceived the target judged the faces to be less moral than participants who learned about consistently immoral targets.

#### **3.2.2.5 Moderators of Misperception Experiences and Effects**

Table 3.4. Impression Importance (Time 1) Predicting Meaning Threat and Negative Affect

	Worldview Affirmation		Prostitute Bond		Uncanny		Negative Affect	
	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$
Impression Importance	.01 [-0.13, 0.14]	.939	-.00 [-0.14, 0.14]	.985	<b>.22 [0.07, 0.37]</b>	<b>.004</b>	<b>.24 [0.09, 0.39]</b>	<b>.001</b>
$R^2 / R^2_{\text{adj}}$	.00/-.01		.00/-.01		.04/.04		.05/.04	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

Table 3.5. Impression Importance (Time 1) Predicting Social Belief Measures

	Confidence Judging Others' Character (Direct)		Confidence Judging Others' Character (Indirect)		Impressions of People (Direct)		Impressions of People (Indirect)	
	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$	$\beta$ [95% CI]	$p$
Impression Importance	<b>.25 [0.11, 0.39]</b>	<b>&lt;.001</b>	.09 [-0.05, 0.23]	.191	.06 [-0.08, 0.21]	.386	.11 [-0.03, 0.24]	.110
$R^2 / R^2_{\text{adj}}$	<b>.05/.05</b>		.01/.00		.00/.00		.01/.01	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

Table 3.6. Impression Confidence (Time 1) Predicting Meaning Threat and Negative Affect

	Worldview Affirmation		Prostitute Bond		Uncanny		Negative Affect	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Impression Confidence	-.04 [-0.18, 0.09]	.532	.04[-0.10, 0.18]	.561	.14 [-.01, 0.30]	.063	.12 [0.09, 0.39]	.133
$R^2 / R^2_{\text{adj}}$	.00/.00		.00/.00		.02/.01		.01/.01	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

Table 3.7. Impression Confidence (Time 1) Predicting Social Belief Measures

	Confidence Judging Others' Character (Direct)		Confidence Judging Others' Character (Indirect)		Impressions of People (Direct)		Impressions of People (Indirect)	
	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>	$\beta$ [95% CI]	<i>p</i>
Impression Confidence	<b>.38 [0.25, 0.52]</b>	<b>&lt;.001</b>	<b>.26 [0.13, 0.40]</b>	<b>&lt;.001</b>	<b>.22 [0.07, 0.36]</b>	<b>.004</b>	<b>.20 [0.07, 0.34]</b>	<b>.004</b>
$R^2 / R^2_{\text{adj}}$	<b>.13/.13</b>		<b>.07/.06</b>		<b>.04/.04</b>		<b>.04/.04</b>	

Note. Bolded estimates are significant at  $p < .050$ . CI = confidence interval.

### **3.2.2.5.1 The Role of Initial Impression Importance**

Although all participants within the Inconsistent Target condition read the same information about the target, and differences in impression importance therefore reflects differences in participants, we conducted exploratory analyses on the role of impression importance in this experience. Specifically, we tested whether the importance with which participants' viewed their initial impressions of the target (at Time 1) predicted their later experience of finding out that the target was not actually a good person. Based on our interest in the role of impression importance in the misperception experience, we conducted the following analyses using only the Inconsistent Target condition sample ( $n = 210$ ).

As can be seen in Table 3.4, the importance of participants' initial impression did not predict greater desire to affirm meaning. However, initial impression importance did predict experiencing more negative affect and uncanniness after learning about the inconsistent target. At the same time, the importance of participants' initial impressions also predicted more confidence judging others (using the Direct measure), although it did not predict other social belief outcomes. Table 3.4 presents the results of these latter analyses.

### **3.2.2.5.2 The Role of Initial Impression Confidence**

We also explored whether participants' initial confidence in their impressions of the target predicted their responses to learning they had misperceived the target's character. We again conducted these analyses on the Inconsistent Target condition only ( $n = 210$ ). As can be seen in Table 3.5, initial impression confidence at Time 1 did not predict desire to affirm meaning or negative affect, but marginally predicted feeling more uncanny.

Table 3.6 presents the results of initial impression confidence predicting social belief measures. Participants' confidence in their initial impressions of the target strongly predicted

higher confidence judging other people's character later as well as more positive impressions of people. The more confident they were in their impressions at Time 1, the more confident they were in judging others and the more moral they thought people were at Time 2.

### **3.2.3 Discussion**

Study 2 provides mixed support for our hypotheses regarding the negative effects that misperceptions have on people's sense of meaning, emotional state, and broader judgments of others. Findings from this study replicated many of the findings from Study 1, but cast doubt on the proposed theoretical mechanism of the effects. Furthermore, we found mixed evidence that misperceptions violated participants' sense of meaning.

Participants in the Inconsistent Target condition did not exhibit increased desire to affirm alternate sources of meaning, compared to participants in the other conditions. However, participants in this condition did report feeling more uncanny than those in the control condition, an emotion that taps into unease, uncertainty, and the feeling that things don't make sense. Moreover, participants who learned about an inconsistent target reported feeling less confident about their judgments of others' character and holding more negative impressions of people in general, compared to participants in our control condition. These findings match our hypotheses, and suggest that something about misperception experiences do lead to a sense of unease, negative emotions, and a broad questioning of one's judgments of others. In this sense, these findings replicated those in Study 1.

However, contrary to our hypotheses, findings also revealed that participants in the Consistent Target condition experienced a similar pattern of effects as those in the Inconsistent Target condition, with the exception that they did not see people as being more immoral compared to participants in the control condition. Against predictions, we found that participants



in this condition exhibited a weak desire to affirm meaning, as measured by the bond they set for the prostitute. Moreover, we found that participants in this condition did report more uncanniness, marginally more negative affect, and marginally less confidence judging character compared to the control conditions. Although these latter effects were consistently weaker than those exhibited in the Inconsistent Target condition, there were few significant differences between these two conditions. These findings suggest that learning about the immoral behaviors of a consistently immoral target may be enough to elicit similar effects. However, it is notable that the negative effects are slightly weaker in this condition, even though participants are learning even more immoral information about the target compared to participants in the Inconsistent Target condition.

In this study, we also explored the role of impression importance and confidence after participants in the Inconsistent Target condition learned that they had misperceived the target. Participants in this condition who viewed their initial impressions of the target as more important reported experiencing more negative affect and more uncanniness following the news they learned. However, they also reported greater confidence judging others (as measured by the direct measure), although this could be due to the fact that both measures may tap into a general sense of confidence judging others. Indeed, participants who felt more confident about their initial impressions of the target also reported significantly more confidence judging others' character and more moral impressions of others later, suggesting that these measures may reflect stable individual differences in participants' general approach to judging others.

Taken together, the current study contributes an experimental test of the proposed theory. Although the findings largely corroborate those found in Study 1, the lack of difference between the Inconsistent and Consistent Target conditions cast doubt on the proposed causal mechanism.

Nevertheless, these findings raise intriguing questions about the effects of witnessing immorality, as it is currently unknown whether witnessing consistent immorality may also threaten meaning and why.

## **2.4 Limitations**

There are a number of limitations to the current study. Several of these center around the experimental manipulations used in the Inconsistent and Consistent Target conditions. First, manipulation check analyses revealed that participants in the Consistent Target condition did not actually hold consistent views of the target throughout the study. Although they did judge the target worse at Time 1 compared to those in the Inconsistent Target condition, their impressions of the target still changed significantly once they learned of the target's immoral behavior at Time 2. Secondly, we presented the target as someone who lived nearby, had attended the same school as the participant, and who was successful in the community. Participants in the Consistent Target condition may have therefore been threatened to learn that this immoral target lived nearby, and was also unjustly successful in their own community. Taken together, the Consistent Target condition may have involved more inconsistency than planned, and may have presented an alternative reason to feel threatened. This may be one reason why participants in the Consistent Target condition exhibited a weak desire to affirm meaning. We plan to address these limitations by running a follow-up study in which the valence of behavior in the Consistent Target condition remains constant throughout the impression-formation activity. Moreover, we will present the target as a past participant of a different study, thereby decreasing both the potential threat of geographical proximity and removing any unjust circumstances.

Another limitation concerns the potential lack of realism and personal relevance of the target in this study. In order for people to feel a sense of meaning threat, they must feel a

disruption in their established expectations about the world. Although we strove to make the target seem more believable, such that almost all participants believed they were reading information about a real individual, the information they learned about the target may not have been very salient. Participants read only eighteen behavioral statements about the target, in a session that lasted a few minutes at most. Furthermore, as we described this information as being collected from public sources, these behavioral statements did not include many personal details about the target. As such, participants may not have had enough time to develop a strong expectancy about the target's character, and these expectancies may not have felt very personally relevant. This lack of realism and personal relevance may have rendered the manipulation less threatening to participants' meaning, and may be one reason why participants in the Inconsistent Target condition did not exhibit a desire to restore meaning. In our follow-up study, we plan to address this concern by lengthening the amount of time participants will spend learning about the target individual, and by adding more personal details to the information they read.

Additionally, another limitation in this study involves the specific measures used to capture desire to affirm meaning. Although the majority of meaning threat measures involve moral value affirmation (for a review, see Burke, Martens, & Faucher, 2010), MMM posits that people compensate for threatened meaning by affirming alternate meaning sources (Heine, Proulx, & Vohs, 2006). In this study, however, we attempted to threaten participants' sense of meaning using information about an individual's moral wrongs. Moral value affirmation may not therefore have been a valid way for them to restore meaning. In future research, we will address this limitation by making use of non-domain specific meaning threat measures (for examples, see Proulx, Heine, & Vohs, 2010).

A final limitation of this study involves the shortcomings of using a between-subjects design. We chose to have separate conditions in order to better obscure the purpose of the study, and to limit the length of the study. However, because we were unable to capture participants' baseline measures on the key dependent variables prior to the manipulation, the findings are open to several different interpretations. For instance, we found that impression importance predicted participants in the Inconsistent Target condition feeling even more confident judging character following the manipulation. Furthermore, impression confidence also predicted feeling more confident judging character, as well as more positive impressions of people following the manipulation. One interpretation of these results is that these measures capture stable individual differences in the way certain participants make judgments about others in general. In order to disambiguate these findings, and to increase statistical power, we are therefore planning a follow-up study using a within-subjects design.

## **2.5 Future Directions**

In Study 2, we aimed to test whether misperceptions caused threats to meaning, negative affect, and broader doubt and negativity in judgments of others. We found mixed evidence that misperceptions do lead to most of these predicted effects, but these findings cast doubt on the proposed causal mechanism. We aim to conduct follow-up research clarifying the findings of this study, and addressing the above limitations. Moreover, we will also pursue a number of related future directions.

First, in future research, we aim to explore the different cognitive, affective, and motivational consequences that arise from whether the perceiver feels they alone made a judgment error or whether they feel others would also make such an error. In the Inconsistent Target condition in Study 2, participants read unambiguous information at Time 1 about the

individual's good moral character. Although they were therefore effectively surprised by the information they later read at Time 2, this manipulation may have led perceivers to feel that anyone would have made a similar mistake in judgment. The degree to which perceivers feel alone or joined in misperceiving another may predict feeling different types of threat. In the first case, perceivers who feel they alone made an error may feel tension in knowing that they must work to resolve the flaws in their perceptions of others. In the second case, perceivers who feel that anyone would have made the same error may be confronted with the view that people are inherently unpredictable. In future research, we are interested in the different consequences involved in either of these cases, and exploring which presents more of a threat to perceivers.

Second, we are interested in exploring the role of time in perceivers' experience of such character revelations. Firstly, research in meaning maintenance and terror management theory highlight the importance of giving participants a delay when measuring sense of meaning threat (Pyszczynski, Greenberg, & Solomon, 1999). When faced with a meaning threat, people may need time for the threat to fade from consciousness, such that they begin to engage in unconscious defense against this threat. Although participants in the current study first answered the affect scale before moving on to the worldview affirmation measures, it is possible that participants needed more of a delay in order for the threat to sink into their unconscious. In future research, we will explore the effect of giving participants a longer delay between the character revelation experience and measuring their responses.

Moreover, we are also interested in the effect that longer time delays have on perceivers' ongoing affective, motivational, and cognitive states. Using the current paradigm, we are only able to capture immediate responses to learning about someone's true character. However, it is possible that the participants' responses to such an experience change with time (for an

analogous discussion on the role of time in grief, see McClowry, Davies, Kay, Kulenkamp, & Martinson, 1987). For instance, in Study 1, we found evidence that behavioral inconsistency predicts both sadness and disgust. However, it is unknown whether both emotions emerge at the same time points, or whether individuals first experience avoidance-based disgust, and then slowly come to feel sad at the disillusionment they feel regarding the target's bad character. Future research will therefore aim to investigate how the experiences of such events shift given the passing of time.

## **Chapter 4: General Discussion**

People have an innate need to construct meaningful expectations about the world around them (Heine, Proulx, & Vohs, 2006). At the same time, people also demonstrate an acute interest in forming impressions about other people, with specific focus on judging others' moral characters (Goodwin, Piazza, & Rozin, 2014). The present research connects these findings, applying a meaning maintenance lens to explain the importance of feeling like we can judge others' characters accurately. We contend that social perception plays a key role in helping individuals construct meaning about their social worlds, such that perceivers feel a threat to meaning when they make apparent mistakes in judging others' character. The current research presents evidence that apparent mistakes in perceiving character indeed threaten perceivers' sense of meaning, making them feel less confident about judging others in general and more expectant that others have bad moral character. This research contributes to understanding why character revelations are uniquely impactful, aversive, and provocative in eliciting extreme responses.

### **4.1 Summary of Findings**

In Study 1, we presented evidence from a retrospective study in which we examined participants' recollections of their past experiences of feeling they may have misjudged someone's moral character. Findings from this study corroborated our theoretical predictions, with participants reporting that the inconsistency in the target's actions violated their sense of meaning, elicited negative emotion, and affected their broader judgments of the social world around them. Moreover, we found that participants who particularly valued their initial impression of the target came to a more negative later judgment of the individual, potentially because they attributed their mistake to duplicity on the part of the target. We also found that these experiences are indeed quite prevalent in everyday life.

In Study 2, we investigated the causal link between misperceiving character and the proposed effects on meaning, affect, and broader judgments of others. Although participants did not exhibit an increased desire to restore meaning, they did report feeling a state of epistemological unease. Moreover, participants who misperceived the target felt more negative affect, less confident judging others, and held more negative views of other people than participants who did not go through the impression-formation activity. However, we found that participants who learned about a consistently immoral target also reported similar affect and cognitions after the experience. Although there are several methodological reasons for these unexpected findings, the causal mechanism for misperceptions of character remain unclear. We therefore aim to conduct follow-up research to further test the proposed theory.

## **4.2 Implications**

The current findings bridge gaps between meaning maintenance, social perception, and moral psychology research to investigate how people depend on their moral perceptions of others for meaning. These findings highlight the importance of understanding how and what types of social perceptions afford the most meaning. Furthermore, the present research corroborates current perspectives on the importance of moral character perception, demonstrating that apparent errors in moral character perceptions can be aversive and consequential to perceivers' sense of prediction, control, and meaning. We also provide suggestive evidence that people may judge misperceived targets even more negatively if they feel invested in their impressions of the target as a good person, out of a desire to make meaning from this threatening experience. To our knowledge, this is the first research investigating how revelations of character misperceptions affect perceivers, and how perceivers respond to these types of experiences.



Our findings have several implications for other fields of study. First, this research highlights the importance of considering how different types of anomalous stimuli threaten meaning. Past research in the field of meaning has mainly focused on whether different types of stimuli can threaten meaning (e.g. Proulx & Heine, 2008), as a reply to the terror management theory premise that only mortality-related stimuli elicit existential anxiety (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). Therefore, less focus has been paid to differences in how meaning can be threatened. In the present research, we demonstrate that apparent mistakes in character perceptions violate perceivers' sense of meaning in unique ways. Specifically, apparent misperceptions threaten perceivers' sense that they can judge others accurately, and also implicate their broader expectations that other people are inherently good. We further find that violations in both of these beliefs predict the perceiver's tendency to see the world as unpredictable. Future research in meaning maintenance should also compare the degree and ways in which different types of discrepancies in expectations violate meaning. Moreover, future research should explore whether meaning threats are more difficult to accommodate when they threaten the content of individuals' beliefs or when they threaten the reliability with which individuals form these beliefs.

The current research also has implications for approaches to impression-updating. People tend to hold onto the initial impressions they form of others (Asch, 1946), as these impressions exert an anchoring effect on people's views of targets' later behavior (Rabin & Schrag, 1999). As such, current research on impression-updating focuses mainly on what types of target information succeed in causing perceivers to change their impressions of others (Mende-Siedlecki, 2018; Cone & Ferguson, 2015; Mann & Ferguson, 2015). This focus on when perceivers change impressions, however, may obscure differences in the degree to which

perceivers change their impressions. Moreover, this focus on the types of information that prompt impression-updating may obscure the influence of participants' broader motivations to avoid evidence that they have made a mistake in judging someone. Our findings highlight the importance of considering impression-updating within the context of perceivers' desire to feel they can make accurate judgments about others' character. Moreover, the present research suggests that perceivers who encounter character revelations may be looking for ways to construct meaning out of their experiences. Future research in impression-updating should therefore investigate how the desire to retain and restore meaning influences the degree to which perceivers change their judgments of inconsistent targets.

The present research on character revelations also has implications for several other related topics concerning judgments of morally inconsistent characters, such as people's hatred for hypocrites (Jordan, Sommers, Bloom, & Rand, 2017) and aversion for betrayal (Koehler & Gershoff, 2003). First, the current research poses an underlying reason for why people may dislike hypocrites. Research on perceptions of hypocrisy find that people dislike hypocrites because they send out false signals regarding their moral character (Jordan, Sommers, Bloom, & Rand, 2017). However, research has not yet identified why false signals are disliked; one purported interpretation is that false signals bring hypocrites undeserved praise. The current research illuminates another potential reason why people dislike these false signals: false signals inspire misperceptions, which come with grave consequences for one's safety and sense of meaning. From this view, people may dislike hypocrites because they disrupt the important process of forming reliable moral character perceptions of others. As such, the dislike of hypocrites may reflect the desire to blame someone who introduces uncertainty into the world.

Secondly, the current research also overlaps with research on betrayal aversion (Koehler & Gershoff, 2003). Betrayal is similar to the experience of a misperception, as it involves cases in which a target violates the perceivers' moral expectations of them. However, betrayals are distinct, as they come specifically in the form of transgressions that violate the established expectations of a trusting relationship (Koehler & Gershoff, 2003). People dislike betrayal, and punish perpetrators who betray others, purportedly because these targets knowingly violate a promise to their victims. Moreover, by eliciting and then violating that trust, they gain increased access to the victim and therefore pose even more of a threat than if they had simply projected immoral intentions from the start.

We propose that misperceptions of character involve a broader set of experiences than simply betrayal, and ought to be aversive even when betrayal is not directly involved. In studying misperceptions of moral character, we focus on any type of information that signals an error in the perceiver's moral impression of another. Such information does not have to involve betrayal, nor even a victim at all. However, it is possible that part of the reason why apparent misperceptions of character are threatening is because they are an antecedent condition of betrayal. In other words, misperception experiences signal that the perceiver has a tendency to misjudge bad people as being good, which opens up the possibility that they will encounter a betrayal of moral expectations either with the current target or a different one. Aversion to misperceptions may therefore precede aversion to betrayal. Future research should examine the interconnections between these two phenomena, and the mechanisms that give rise to the negative affect and aversion experienced in each respective case.

Finally, the current research highlights the importance of investigating moral cognition within the context of ongoing relationships with others. Moral cognition research most

commonly employs paradigms in which third-party observers judge strangers who have committed a crime (such as with trolley problem paradigms, Greene, Sommerville, Nystrom, Darley, & Cohen, 2001). However, this research limits the study of moral judgment to cases in which perceivers have no past history or future interactions with the perpetrator (for a full discussion, see Bloom, 2011). Therefore, there is little understanding of how people engage in moral reasoning in everyday life, with people they actually know. In the present research, we find that previous impressions of the target's character impact the way that the target's behavior is perceived. Moreover, we find tentative evidence that perceivers may come to judge immoral behavior even more harshly when that immoral behavior is at odds with who the target previously appeared to be. These findings highlight the importance of considering perceivers' previous expectations of targets when investigating their moral reasoning.

#### **4.3 Limitations**

Although the current research presents promising evidence regarding the experience of character revelations, there are a number of important limitations that qualify the findings. First, all of the measures used in these studies rely on participants' self-reports. As discussed in earlier chapters, participants may be expressing their implicit theories about their experiences rather than true mental states (e.g. Nisbett & Wilson, 1977). Although self-report may at times be a valid measure of participants' mental states and behavioral intentions (e.g., Ericsson & Simon, 1980), we nevertheless plan to conduct follow up studies using alternative measures of participants' mental states. Specifically, we aim to replicate the present findings using behavioral measures to capture participants' desire to approach or avoid the target, and confidence in making judgments about others. Potential ideas include using embedded social cognition techniques to measure approach and avoidance motivation (e.g. Crawford, McCarthy, Kjaerstad, & Skowronski, 2013),

and using trust games to assess participants' behavior around others (e.g., Delgado, Frank, & Phelps, 2005). For instance, future research can examine how likely participants are to trust their judgments of others when having to make costly interaction decisions, and whether they are likely to trust others following a misperception experience.

Second, the current findings do not provide clear evidence that misperceptions of moral character affect perceivers equally across relational categories. We propose that misperceptions have the same epistemological and affective consequences regardless of the relational bond between the perceiver and the target, although the consequences ought to be moderated by impression importance. However, it is possible that the effects of misperceptions are constrained within certain relational categories, such as close relationships. Study 1 is not able to distinguish between the effects of being in a relationship compared to not being in a relationship with the target, due to the small sample size for targets who are public figures. Furthermore, whereas we find some supporting evidence for our theory in Study 2, the mixed findings may be due to the fact that the target is an unrelated public figure that the perceiver has never met. Although people often feel that they have a relationship with public figures (see the research on parasocial relationships, Horton & Wohl, 1956), and do have certain relational expectations for figures such as politicians (Kreps, Laurin, & Merritt, 2017), it is possible that perceivers still judge public figures differently. For instance, perceivers may not depend as much on their perceptions of people they have never met, and they may be aware that public figures notoriously manage their impressions (Schlenker, 1980). In our future research, we aim to further explore whether misperceptions of character generalize past close partners, and whether they threaten meaning even without a real relationship with the target.

A final limitation concerns our approach to the proposed theory. We focus on misperceptions of moral character because (1) they appear to be a common and disorienting type of experience in everyday life, and (2) we propose that these misperceptions affect us more deeply than misperceptions in any other social domain. We also implicitly propose that these misperceptions affect us differently than misperceiving elements in the non-social domain, such as discovering that the world is round when you previously thought it was flat. However, the current findings can only be taken as evidence that misperceptions of character are significant, impactful, and have specific consequences on one's broader views of the world. Although there is evidence that reactions to moral character expectancy violations are distinct from reactions to competence expectancy violations (Harris & Fiske, 2010), and that neural responses to social expectancy violations are distinct from responses to non-social expectancy violations (Dungan, Stepanovic, & Young, 2016), the current research does not speak to whether misperceptions of moral character are experienced differently from other types of misperceptions. Future research must explore whether the effects of misperceiving character are distinct from the effects of misperceiving other aspects of the world, and whether they are indeed more impactful.

#### **4.4 Future Directions**

Despite the above limitations, the present research points to a number of novel future directions for research. First, future research should further explore connections between misperceptions of moral character and motivations to maintain meaning. Specifically, more attention should be paid to the different ways in which perceptions of character provide a sense of meaning, and how perceivers make meaning when faced with a misperception. Given that the reliability of one's moral judgments are important for meaning, future research should investigate whether making accurate judgments of others' character helps restore meaning when perceivers feel threatened by

alternate sources of uncertainty. Furthermore, future research should explore the myriad ways in which people actually make meaning when faced with a character revelation. For instance, future studies ought to explore whether participants engage in comforting post-hoc reasoning, such as retrospectively identifying red flags in the target's past behavior. Such research can further inform our understanding of how people respond to character revelations in everyday life.

Another future direction involves the potential overlap between the experience of misjudging character and vicarious emotions. In the present research, we were interested in the experience of learning about diagnostic immoral behavior from a seemingly good person. We proposed that the negative affective consequences of such an experience stem from the epistemological threat posed by the mistake in judgment. However, related research on vicarious guilt and shame also center around the experience of learning that someone you are close to has committed wrongdoing (Lickel, Schmader, Curtis, Scarnier, & Ames, 2005). People experience vicarious guilt when they feel in some way responsible for the wrongdoing. On the other hand, people feel vicarious shame when the target's actions implicate a shared social identity, and the perceiver therefore wants to distance themselves from the target. It is possible that simply misjudging someone as a good person elicits a degree of vicarious guilt and shame, either through feeling like one has implicitly supported the target, or feeling like one's mistakes in judgments reflect a defect in the perceiver's own character. Although the present research did not explicitly measure emotions such as shame and guilt, we do find evidence of avoidance emotions such as disgust (Curtis, de Barra, & Aunger, 2011). Future research should examine whether people can feel vicarious guilt and shame from simply misjudging another individual, and what types of misperceptions incur either guilt or shame.

Finally, future research should examine whether experiences of misjudging character differ across individuals and cultures with different attribution styles. Individuals vary in their implicit theories of personality change, and relatedly, in their use of trait-based judgments (Chiu, Hong, & Dweck, 1997). These differences may impact responses to misperceptions of moral character. Incremental theorists, who see personality as changeable, may be less surprised by behavioral variance and also expect more personality change in general. As cultures differ along these dimensions as well, with collectivist cultures endorsing incremental theories of self more strongly (Norenzayan, Choi, & Nisbett, 2002), we would also expect the experience of misperceptions to be weaker in these cultures. Moreover, collectivist cultures are less prey to making the fundamental attribution error (Ross & Nisbett, 1991), and are more likely to focus on factors in the social context that influence variations in behavior (Morris & Peng, 1994; Lee, Hallahan & Herzog, 1996; Morris, Menon, & Ames, 2001). Finally, collectivist cultures engage in more dialectical thinking (Spencer-Rodgers, Boucher, Mori, Wang, & Peng, 2010), and are more likely to conceive of themselves as both good and bad (Spencer-Rodgers, Peng, Wang, & Hou, 2004). The experience of misperceptions may therefore be very different in these cultures. Whereas Westerners are more likely to pursue reconciliation between inconsistencies (Lewin, 1951), dialectical thinkers are unlikely to think of others as having a one-dimensional essence, and more able to tolerate the observation that a seemingly good person can also have a bad side. At the same time, although much of the epistemological discomfort may be attenuated in collectivist cultures, there may still be a universal pattern in which people strive to protect themselves against immoral others who may mean them harm. Future research ought to explore which dimensions of misperceptions of moral character are subject to cultural variation, and which are more consistent.



## **4.5 Conclusion**

Moral character perception is central to the way people form impressions of others (Goodwin, Piazza, & Rozin, 2014), interact with others (van der Lee, Ellemers, Scheepers, & Rutjens, 2017), and come to know others (Hartley et al., 2016). In the present research, we investigate long-held assumptions that social perception helps individuals establish meaning (Plaks, Grant, & Dweck, 2005), and we focus specifically on the role of moral character perception. Across two studies, we demonstrate that the subjective experience of getting these perceptions wrong threatens perceivers' sense of meaning, making them feel more doubt and negativity surrounding their judgments of others. Although more research must be conducted to isolate the causal mechanism of these effects, the present research establishes the importance of considering individual perceptions of others' character in understanding the broader ways in which perceivers maintain meaning. To our knowledge, this is the first research to investigate how character revelations are experienced and sheds light on why we dislike when angels turn out to be demons.

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## Appendices

### Appendix A: Supplementary Materials, Chapter 2

This section contains supplementary materials for Chapter 2.

#### A.1 Study 1

##### *Items for Focal Measures*

This section contains supplemental details about the measures assessed in Study 1.

##### **Character Judgment** (1 = Strongly disagree / 7 = Strongly agree)

1. [Target name] is a person of strong moral character.
2. I would say that [Target name] is a good person.
3. [Target name] usually does the right thing, even if it's hard.
4. [Target name] is a compassionate person.
5. [Target name] always tells the truth.
6. [Target name] does not shift his/her loyalty easily.
7. [Target name] treats people fairly.

##### **Impression Confidence** (1 = Extremely unsure / 7 = Extremely confident)

1. How confident were you that your impression of [Target name] was correct?

##### **Impression Importance** (1 = Extremely unimportant / 7 = Extremely important)

1. How important was it to you that your impression of [Target name] was correct?
2. How important was it to you that [Target name] was a person of good moral character?

##### **Confidence Judging Others' Character** (1 = Extremely poor / 7 = Extremely good)

1. How would you have rated your abilities as a good judge of character at that time?

##### **Impressions of People** (1 = Extremely negative / 7 = Extremely positive)

1. What was your overall impression of people in general at that time?

##### **Predictable World Beliefs** (1 = Extremely unfair and dangerous / 7 = Extremely fair and safe)

1. To what degree did you feel that the world was a fair and safe place at that time?

##### **Inconsistency of Behavior** (1 = Not at all inconsistent / 7 = Extremely inconsistent)

1. To what degree was this “new information” inconsistent with your initial impression of [Target name]?

**Morality of Behavior** (1 = Extremely immoral / 9 = Extremely moral)

1. At that time that you first learned this “new information” about [Target name], how moral or immoral did you think [Target name]’s specific actions were?

**Duplicity** (1 = Not at all / 7 = Extremely)

1. There are many reasons why we might form an incorrect impression of someone. At that time in your life, during which you felt like your initial impression of [Target name] might not be correct, to what extent did you think that [Target name] had intentionally given you a false impression?

**Sense of Meaning Violation** (Park, Riley, George, Gutierrez, Hale, Cho, & Braun, 2016) (1 = Not at all / 5 = Very much)

When you think about how you felt before and after this experience, how much did the occurrence of this experience:

1. Violate your sense of the world being fair or just?
2. Violate your sense that other forces have control in the world?
3. Violate your sense that God is in control?
4. Violate your sense of being in control of your own life?
5. Violate your sense that the world is a good and safe place?

**Negative Affect** (1 = Not at all / 7 = Extremely)

During this experience, how much did you feel each of the following?

1. Anxious
2. Blue
3. Distressed
4. Frustrated
5. Disgusted

**Judgments of Blame** (1 = Not at all / 7 = Extremely)

1. How much did you ultimately blame [Target name] for the behavior he/she exhibited during this experience?

*Items Used for Exclusion*

**Attention Check 1** (1 = Extremely distrusting / 7 = Extremely trusting)

1. To demonstrate attention to instructions, please select 7 as your answer to this question.

## Attention Check 2 (1 = Not at all / 7 = Extremely)

1. After coming to your new impression of [Target name], please select 6 as your answer to this question in order to demonstrate attention to instructions.

## English Comprehension Check

1. Sylvia wrote many poems, and each of them was cherished and praised for generations to come. She was second only to her contemporary, Madison, who dabbled in postmodernism. Though Sylvia was very skilled, she lacked some of the finesse that her friend possessed, and she was always concerned about her worth as a poet. So she retired early and became a recluse. Who retired early?

## *Misperception Experience Description*

This section contains the instructions used to describe misperceptions of character in Study

*(Page 1)*

In everyday life, we form impressions about people we know. Based on what we know about their intentions and the way they act, we may come to see some people as **good and kind people** and others as **bad and unkind people**.

Because these impressions are based on limited information, these impressions may change or develop further as we learn more about a person. For example, we may sometimes learn surprising information about a person that makes us doubt whether our initial impression of them was actually right.

*(Page 2)*

**Sometimes, for example, you form a good impression of someone, only to learn something about that person that makes you question your judgment about whether they really are a good person or not.**

This may happen with acquaintances, friends, romantic partners, or even public figures you admire in the media. For example, perhaps you think that a friend has betrayed you, or that your romantic partner was dishonest with you. Perhaps you learn that a friend or even a celebrity you admired has a dark past no one knew about. You may simply hear about or see someone you know acting in a way that goes against what you previously thought of them.

*(Page 3)*

For the following activity, we would like you to take a moment to consider whether you have ever felt like you were wrong about your previous judgment of someone's character.

**Specifically, please think back to a time in which you thought someone was a good person, but later learned information that made you doubt your earlier judgment of them as a good person.**

Importantly, we're interested in your experience of doubt, whether or not the person actually turned out to be a good or bad person in the end.

Note: We are interested in your thoughts and experiences regardless of whether you have previously experienced this before or not.

Have you ever had an experience that made you **seriously doubt** your previous judgment of someone as a good person?

1. Yes. I can think of a **specific experience** in which I doubted my judgment of someone as a good person.
2. No. I can't think of a **specific experience** in which I ever doubted my judgment of someone as a good person.

#### *Instructions for Each Time Point*

*(Time 1)*

**Initial Impressions of [Target name]**

We are interested in learning more about your **initial impressions** of [Target name] prior to any experiences that made you doubt or change your initial impression.

Regardless of your current impression of [Target name], please think back to your initial impressions of [Target name]. **Please answer the following questions from the state of mind that you held during that time in your life.**

*(Time 2)*

**Doubting Your Impression of [Target name]**

We are now interested in the **experience** that caused you to doubt or question your initial impression of [Target name] as a good person. For example, perhaps something about [Target name]'s actions, behavior, or personality made you come to doubt whether [Target name] really was a good person.

**Please answer the following questions from the state of mind that you held at the time you experienced doubt about whether [Target name] was a good person.**

*(Time 3)*

**New Impression of [Target Name]**

We are now interested in the **conclusions** you came to about [Target name] after experiencing doubt about whether your initial impression of [Target name] had been correct.

**Please answer the following questions from the state of mind that you held when you came to your revised, updated, or reaffirmed impression about what kind of person [Target name] was.**

*Descriptive Statistics*

Table. Correlations between Key Variables in Study 1

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Time 1 Variables															
(1) Character Judgment															
(2) Impression Importance	.40**														
(3) Impression Confidence	.61**	.45**													
(4) Confidence Judging Others' Character	.40**	.29**	.44**												
(5) Impressions of People	.16**	.06	.22**	.37**											
(6) Predictable World Beliefs	.20**	.16**	.14**	.35**	.62**										
Time 2 Variables															
(7) Confidence Judging Others' Character	-.08	-.11*	.03	.11*	.07	.02									
(8) Impressions of People	.01	-.02	.05	.01	.15**	.13*	.43**								
(9) Predictable World Beliefs	-.02	-.07	.01	.08	.25**	.33**	.45**	.60**							
(10) Inconsistency of Behavior	.46**	.29**	.39**	.25**	.09	.10	-.08	-.06	-.12*						
(11) Morality of Behavior	-.02	-.10*	-.08	-.09	.13*	.10*	.17**	.24**	.26**	-.21**					
(12) Duplicity	.09	.32**	.07	.13*	.02	.09	-.14**	-.16**	-.13**	.11*	-.18**				
(13) Meaning Violation	.08	.31**	.09	.10*	.02	.18**	-.19**	-.25**	-.26**	.13*	-.05	.34**			
(14) Negative Affect	.09	.36**	.15**	.13*	.04	.09	-.23**	-.19**	-.22**	.13*	-.23**	.35**	.57**		
Time 3 Variables															
(15) Character Judgment	.05	-.09	-.04	-.15**	.03	.07	.23**	.35**	.32**	-.15**	.46**	-.33**	-.19**	-.23**	
(16) Judgments of Blame	.10	.11*	.16**	.20**	.07	.05	-.10*	-.13*	-.12*	.27**	-.32**	.27**	.21**	.30**	-.50**

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

Computed correlation using pearson-method.

Table. Descriptive Statistics for Key Variables in Study 1

Variable	<i>M</i>	<i>SD</i>
Time 1 Variables		
(1) Character Judgment	5.61	1.00
(2) Impression Importance	5.51	1.24
(3) Impression Confidence	5.80	1.03
(4) Confidence Judging Others' Character	5.46	1.00
(5) Impressions of People	6.35	1.56
(6) Predictable World Beliefs	4.71	1.35
Time 2 Variables		
(7) Confidence Judging Others' Character	3.76	1.67
(8) Impressions of People	4.32	1.97
(9) Predictable World Beliefs	3.52	1.39
(10) Inconsistency of Behavior	6.02	1.67
(11) Morality of Behavior	2.77	1.92
(12) Duplicity	4.47	2.00
(13) Meaning Violation	2.88	1.15
(14) Negative Affect	4.74	1.40
Time 3 Variables		
(15) Character Judgment	2.57	1.38
(16) Judgments of Blame	7.10	1.32
* <i>p</i> < .05. ** <i>p</i> < .01. *** <i>p</i> < .001.		

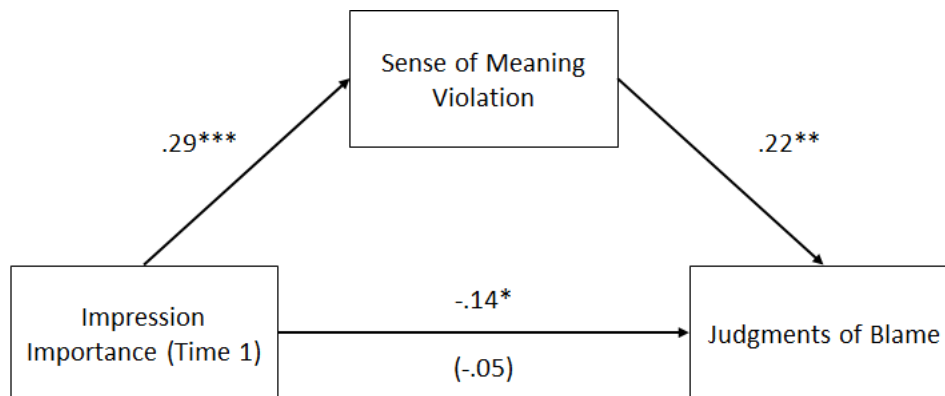
### *Results of Mediation Models Predicting Blame*

This section contains the results of additional mediation analyses predicting blame of the target from impression importance in Study 1.

#### **Predicting Judgments of Blame**

We ran a mediation model with initial impression importance predicting judgments of blame, mediated by participants' sense of meaning violation. The model was tested using a bootstrap estimation approach with 5000 samples. We found significant indirect effect ( $\beta = .06$ , 95% CI [0.03, 0.10],  $p = .002$ ), such that initial impression importance predicted experiencing more threat to meaning ( $\beta = .29$ , 95% CI [0.20, 0.38],  $p < .001$ ), which then predicted blaming the target more ( $\beta = .22$ , 95% CI [0.10, 0.34],  $p = .004$ ).

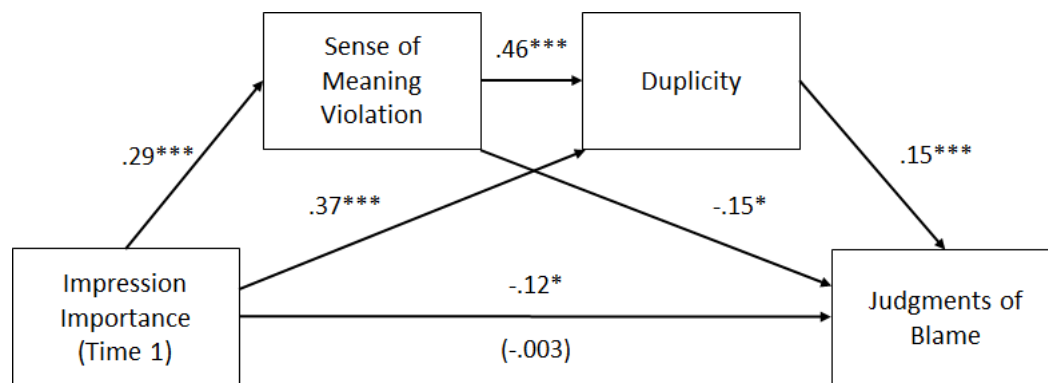
Figure. Indirect effect of Impression Importance (Time 1) on Judgments of Blame through Sense of Meaning Violation



We also ran a serial mediation model with initial impression importance predicting blame through sense of meaning violation and attributions of duplicity. We predicted that holding more important impressions would predict a greater sense of threat, which would lead participants to



attribute more deception on the part of the target and therefore worse character. The model was tested using a bootstrap estimation approach with 5000 samples (using Model 6 in PROCESS macro (Hayes, 2017)). Analyses revealed a significant indirect effect ( $\beta = .02$ , 95% CI [0.01, 0.04]). Initial impression importance predicted experiencing a greater sense of meaning violation ( $\beta = .29$ , 95% CI [0.20, 0.38],  $p < .001$ ), which in turn predicted attributing greater duplicity on the part of the target ( $\beta = .46$ , 95% CI [0.29, 0.63],  $p < .001$ ). This then predicted harsher judgments of blame ( $\beta = .15$ , 95% CI [0.08, 0.22],  $p < .001$ ).



## **Appendix B: Supplementary Materials, Chapter 3**

This section contains supplementary materials for Chapter 3.

### **B.1 Study 2**

#### *Items for Focal Measures*

This section contains supplemental details about the measures assessed in Study 1. We first provide the items of focal study variables and then list other variables that were measured but were not analyzed in this paper.

#### **Character Judgment** (1 = Strongly disagree / 7 = Strongly agree)

1. Joseph is a person of strong moral character.
2. I would say that Joseph is a good person.
3. Joseph usually does the right thing, even if it's hard.
4. Joseph treats people fairly.

#### **Impression Confidence** (1 = Extremely unsure / 7 = Extremely confident)

1. How confident are you that your impression of Joseph is correct?

#### **Impression Importance** (1 = Extremely unimportant / 7 = Extremely important)

1. How important is it to you that your impression of Joseph is correct?
2. How important is it to you that Joseph is a person of good moral character?

#### **Prostitute Bond** (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989) (\$0 / \$999)

For this next activity, imagine you are a judge being asked to provide sentences for a defendant. A jury has already found them guilty and is asking you to assign a fine. Fines for these crimes typically range between \$0 - 999.

Pretrial Information:

Arresting Offence: Prostitution

Defendant's Name: Candace L. Thompson

Defendant's Occupation: Exotic Dancer

Employment Record: Intermittent

Prior Conviction Record: Prostitution, December 5, 2009

Previous Failures to Appear in Court: none

Comments: Defendant was caught engaging in sex acts in a men's washroom of a fast-food restaurant. Restaurant patrons had reported suspicious sounds to an employee. Three witnesses claimed to have seen the defendant accept money from her client just before entering the washroom.

**Worldview Affirmation** (McGregor, Zanna, Holmes, & Spencer, 2001)

In this section, we are interested in assessing opinions on different newsworthy issues. From the following options, pick the one statement that best matches your own opinion on this issue.

Religious Face Coverings:

1. Religious face coverings (e.g., the niqab) should be banned from public spaces across Canada.
2. Religious face coverings (e.g., the niqab) should not be banned from public spaces across Canada.

Conviction (1 = Not at all / 10 = Extremely)

1. How firmly do you believe in this position?
2. How willing would you be to defend this position in an argument?
3. How strong is your conviction about this position?
4. How certain do you feel about this position?

Consensus (1 = 0-10% / 10 = 91-100%)

1. Regarding your position, "[insert chosen position]," what percentage of the general population do you think would mostly agree with this position?
2. Regarding your position, "[insert chosen position]," what percentage of the general population do you think would strongly agree with this position?

Ambivalence (1 = Strongly disagree / 10 = Strongly agree)

1. I find myself torn between the two sides of the issue.
2. My head and my heart seem to be in disagreement on this issue.
3. I have strong mixed emotions both for and against the issue.
4. My gut feelings about this issue lines up perfectly with what my rational intellect tells me to do.

**Uncanny Measure** (Gray & Wegner, 2012;  $\alpha = .65$ ) (1 = Very slightly or not at all / 7 = Extremely)

This scale consists of a number of words that describe different feelings and emotions. Please indicate how much you are currently actively feeling each emotion.

1. Unnerved
2. Uneasy
3. Creeped Out

**PANAS** (Watson, Clark, & Tellegen, 1988) (1 = Very slightly or not at all / 7 = Extremely)

This scale consists of a number of words that describe different feelings and emotions. Please indicate how much you are currently actively feeling each emotion.

1. Interested
2. Distressed
3. Upset
4. Strong
5. Guilty
6. Scared
7. Hostile
8. Proud
9. Irritable
10. Alert
11. Ashamed
12. Inspired
13. Nervous
14. Determined
15. Attentive
16. Active
17. Afraid
18. Enthusiastic
19. Jittery
20. Excited

**Confidence Judging Others' Character (Direct Measure)** (1 = Not at all confident / 7 = Extremely confident)

1. How confident are you that your general impressions of other people are correct?
2. How accurate do you think your general impressions of other people are?
3. How would you rate your general ability as a judge of character?

**Impressions of People (Direct Measure)** (1 = Strongly disagree / 7 = Strongly agree)

1. Most people have strong moral character.
2. Most people are good people.
3. Most people usually do the right thing, even if it's hard.
4. Most people treat others fairly.

**Impressions of People (Indirect Measure)** (1 = Extremely negative / 9 = Extremely positive) and  
**Confidence Judging Others' Character (Indirect Measure)** (1 = Extremely unsure / 9 = Extremely confident)

In the following activity, we will have you engage in a common impression-formation activity where we will show you a total of eight faces and have you rate them.



1. How would you rate your impression of this person's character?
2. How confident are you that your impression of this person is correct?



1. How would you rate your impression of this person's character?
2. How confident are you that your impression of this person is correct?



1. How would you rate your impression of this person's character?
2. How confident are you that your impression of this person is correct?



1. How would you rate your impression of this person's character?
2. How confident are you that your impression of this person is correct?



1. How would you rate your impression of this person's character?
2. How confident are you that your impression of this person is correct?



1. How would you rate your impression of this person's character?
2. How confident are you that your impression of this person is correct?

## *Impression Formation Activity Instructions*

### *(Target Profile)*

We will now present you with the general profile of the individual that you are going to be learning information about. Please really read the profile and reflect on your impression of this individual.

Please note that the name of this individual has been changed for anonymity. All the information presented about this individual is allegedly true, although it has been drawn from various sources (blog posts, interviews with community members, the individual's curriculum vitae) and written to fit the format of our current activity.

### **Target Profile**

**Name:** Joseph Miller

**Age:** 58

**Biography:** Joseph was born in Ottawa, Canada. He later moved to Vancouver to attend the University of British Columbia and has lived there ever since. While in Vancouver, he established a prominent local consulting business and became a well-known figure in the community. Joseph has two kids with his wife, Emily.

It is possible that a minority of our participants may actually know or have a personal relationship with this individual. Although this does not impact your participation in the study, it is important for us to know.

Based on the minimal information we provided you with about Joseph (whose name has been changed for anonymity), do you believe that you know or have a personal relationship with this individual?

1 = No. I am certain that I do not know this individual.

2 = I don't think I know this individual.

3 = I'm not sure if I know this individual.

4 = I think I know this individual.

5 = Yes, I am certain that I know this individual.

### *(Time 1)*

### **Inconsistent Target Condition**

We will now provide you with some information about Joseph's personality as well as his activities in his community. We are interested in how you form an impression based on this

information. After each series of statements about Joseph, we will ask you specific questions about your impression of him.

**Please carefully read each of the following behavioral statements, and really reflect on what kind of person you think Joseph is, given each new piece of information you learn about him.**

1. Joseph was known to be a helpful member of the community. He often helped organize local food drives.
2. Joseph often involved his business in local charitable efforts.
3. Joseph often traveled for business and was commonly out of town.
4. Joseph spent his free time volunteering as a local sports coach in his neighbourhood.
5. Joseph was a mentor to aspiring entrepreneurs as well as younger children in his neighbourhood.
6. Joseph often visited a local gym on weekends.
7. Joseph often gave generous bonuses to his employees.
8. Joseph once helped raise money so that a local school could buy more supplies for their students.
9. Joseph was known to enjoy dining in neighbourhood restaurants, and could often be found at local diners.
10. Joseph was known to be an involved parent while his children were attending the local school. He often helped volunteer at school events.
11. Joseph often volunteered his services to provide professional development services to disadvantaged members of the community.
12. Joseph often took walks in his neighbourhood.
13. When a neighbour fell ill one year, Joseph was often seen visiting and helping out at his neighbour's house.
14. When he had the time, Joseph volunteered as a local firefighter.
15. Joseph moved a few times since coming to Vancouver, and has lived in a few different parts of the city.
16. One month, Joseph donated half of his income to charities providing relief to hurricane-stricken states.
17. Joseph created a small annual scholarship at his children's old high school to help disadvantaged students.
18. Joseph worked for other local consulting businesses before starting his own.

#### Consistent Target

1. Joseph was known to have raised his business rates to exploit vulnerable clients.
2. Joseph was once caught for driving away from a minor car accident.
3. Joseph often traveled for business and was commonly out of town.
4. Joseph was disliked by members of his community for being irritable and rude.
5. Joseph was rumored to have used racial profiling while hiring for his business.
6. Joseph often visited a local gym on weekends.
7. Employees at Joseph's company disliked him and often quit.
8. Joseph was not known to be an involved parent while his children were attending the local school. He often failed to show up for school events.



9. Joseph was known to enjoy dining in neighbourhood restaurants, and could often be found at local diners.
10. Joseph was fired from an old job for stealing office equipment.
11. Joseph was known to give female employees a difficult time.
12. Joseph often took walks in his neighbourhood.
13. At a time when many local businesses committed to supporting hurricane-relief charities, Joseph's company did not.
14. Joseph was once overheard shouting obscenities at neighbourhood children who walked past his house.
15. Joseph moved a few times since coming to Vancouver, and has lived in a few different parts of the city.
16. When a neighbour fell ill one year, Joseph refused to pitch in to a local fundraiser for that neighbour.
17. Joseph was rumored to have kept the money that his company collected under the guise of contributing to cancer research.
18. Joseph worked for other local consulting businesses before starting his own.

*(Time 2)*

You will now learn some new information about Joseph. Please pay close attention to this new piece of information, as it was information that became known about Joseph years after he became established in the community. As it is more recent than some of the other information that you learned about Joseph, it may be more relevant to your evaluation of Joseph.

In 2008, Joseph was arrested and charged for child molestation.

This information was reported in the Vancouver Sun on July 12, 2008. Joseph Miller was charged with a felony count of sex acts and three felony counts of lewd acts on a minor. Joseph's activities were largely unknown to the members of his community and to his family.

### *Descriptive Statistics*

This section contains the correlations and descriptive statistics for key variables in Study 2, split by condition ((1) Inconsistent Target Condition, (2) Consistent Target Condition, and (3) Control Condition).

Table. Correlations between Key Variables in Study 2 Inconsistent Target Condition ( $n = 210$ )

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	<i>M</i>	<i>SD</i>
(1) Character Judgment (Time 1)												5.88	0.87
(2) Impression Importance (Time 1)	.24**											4.13	1.35
(3) Impression Confidence (Time 1)	.38**	.29**										4.26	1.40
(4) Character Judgment (Time 3)	-.01	.02	.06									2.24	1.02
(5) Prostitution Bond	.06	-.00	.04	.08								324.90	248.40
(6) Worldview Affirmation	.02	.01	-.04	-.11	-.14*							6.88	1.64
(7) Uncanny	.19**	.20**	.13	-.14*	.05	.08						2.19	0.95
(8) Negative Affect	.06	.22**	.10	.01	.25**	.02	.64**					1.57	0.62
(9) Confidence Judging Others' Character (Direct Measure)	.11	.24**	.36**	-.04	.02	-.06	.01	.03				4.26	1.04
(10) Confidence Judging Others' Character (Indirect Measure)	.02	.09	.26**	.03	.12	.04	-.01	.07	.32**			4.97	1.56
(11) Impressions of People (Direct Measure)	.14*	.06	.20**	.08	.05	-.00	-.03	-.07	.00	.07		4.15	1.09
(12) Impressions of People (Indirect Measure)	.01	.11	.20**	.03	-.09	.06	.02	-.06	.19**	.53**	.26**	5.21	0.81
* $p < .05$ . ** $p < .01$ . *** $p < .001$ .												<i>Computed correlation using pearson-method.</i>	

Table. Correlations between Key Variables in Study 2 Consistent Target Condition ( $n = 200$ )

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	<i>M</i>	<i>SD</i>
(1) Character Judgment (Time 1)												2.17	0.83
(2) Impression Importance (Time 1)	.02											3.82	1.30
(3) Impression Confidence (Time 1)	-.38**	.11										3.90	1.43
(4) Character Judgment (Time 3)	.68**	.04	-.25*									1.40	0.65
(5) Prostitution Bond	.10	.16*	.05	.11								363.95	250.42
(6) Worldview Affirmation	-.05	.08	.06	-.08	-.09							6.88	1.75
(7) Uncanny	-.01	.06	-.02	-.07	-.07	-.05						2.09	0.88
(8) Negative Affect	.14	.09	-.01	.12	.01	-.03	.67**					1.48	0.57
(9) Confidence Judging Others' Character (Direct Measure)	-.17*	-.02	.21**	-.16*	.02	-.03	.06	.01				4.35	0.98
(10) Confidence Judging Others' Character (Indirect Measure)	-.09	-.06	.20**	-.07	.06	.08	.05	.06	.36**			4.99	1.66
(11) Impressions of People (Direct Measure)	.01	.08	.15*	-.05	.02	.12	.03	-.01	.22**	.13		4.37	1.01
(12) Impressions of People (Indirect Measure)	-.14	.04	.05	-.13	-.08	.17*	.07	-.10	.27**	.51**	.21**	5.37	0.80
* $p < .05$ . ** $p < .01$ . *** $p < .001$ .												<i>Computed correlation using pearson-method.</i>	

Table. Correlations between Key Variables in Study 2 Control Condition ( $n = 200$ )

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	<i>M</i>	<i>SD</i>
(1) Character Judgment (Time 1)												3.78	2.08
(2) Impression Importance (Time 1)	.18*											3.75	1.41
(3) Impression Confidence (Time 1)	-.03	.10										4.47	1.39
(4) Character Judgment (Time 3)	.54**	.09	-.16*									1.77	0.97
(5) Prostitution Bond	.08	.04	.09	.10								314.6 4	247.51
(6) Worldview Affirmation	.00	-.03	.11	-.13	-.09							7.05	1.73
(7) Uncanny	-.11	-.03	-.14	.06	.08	-.04						1.49	0.50
(8) Negative Affect	-.07	.06	-.06	.04	.01	-.07	.68**					1.38	0.48
(9) Confidence Judging Others' Character (Direct Measure)	.09	.04	.19**	-.02	.10	-.03	-.04	-.00				4.53	0.95
(10) Confidence Judging Others' Character (Indirect Measure)	.11	.10	.17*	.01	-.08	.09	.01	-.01	.32**			5.35	1.41
(11) Impressions of People (Direct Measure)	.07	.03	-.04	.13	.03	-.01	.00	-.16*	.02	.05		4.37	0.97
(12) Impressions of People (Indirect Measure)	.08	-.03	.05	.08	-.01	.05	-.10	-.15*	.18*	.45**	.26**	5.30	0.80
* $p < .05$ . ** $p < .01$ . *** $p < .001$ .													<i>Computed correlation using pearson-method.</i>