

University of Nevada, Reno

**Hierarchical causal chaining: The impact of necessity, sufficiency, foreseeability,
and choice on attributions**

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in
Social Psychology

by

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Abstract

Undesirable and avoidable outcomes are often the result of several parties acting together with each sharing some of the responsibility, blame. Causal chains occur when one party's actions are contingent on the actions of another party such that they can be viewed as a consequence of the previous actor. How culpability is assessed in such a situation is critical especially in civil law in matters of organizational wrongdoing, as the party that was instrumental in bringing about a negative outcome may have been constrained or enabled by the actions of others. The first goal of the current research is to understand the dynamics of assigning culpability when the causal sequence of events involving multiple human actions produces a negative outcome. A second goal is to examine the implications of individual differences in attitudes and cognitive orientation for the assessment of culpability in the context of such causal chains. The current study ($N = 528$ MTurk participants) examines the impact of necessity, sufficiency, foreseeability, and choice on attributions of culpability. The study uses a 2 (Top Manager: High vs. low foreseeability) x 2 (Middle Manager: High vs. low foreseeability) x 2 (Top Manager: Choice in decision vs. no choice) x 2 (Middle Manager: Choice in decision vs. no choice) x 2 (Top Manager: Necessary vs. sufficient cause) x 2 (Middle Manager: Necessary vs. sufficient cause) design. The impact of individual differences (e.g., attributional complexity, civil litigation attitudes, and independence/interdependence) on these relationships is also explored. Results indicated that the closest actor to the wrongdoing tended to be held most culpable. Actor choice and foreseeability were the primary factors in determining culpability, followed by actor necessity/sufficiency, but that all of these elements were impacted by individual difference

variables. Although results tended to vary widely, there were still several important findings that inform how individuals determine attributions of culpability within a causal chain.

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Chapter 1: Introduction

There are situations involving causal chaining that results in a wrongdoing occurring frequently in today's society. The recent Wells Fargo account fraud can act as an example of causal chaining within an organization (Egan, 2016). Wells Fargo's CEO John Stumpf decided to put certain sales goals in place that would impact those who work at lower levels of the company. These goals pressured individuals in management positions to in-turn pressure their employees to meet these goals. The result was that a large number of bank employees fraudulently opened accounts to meet the goals set by the company. In situations like this, there are a variety of ways in which people can choose to attribute responsibility, blame, and liability amongst the different parties. For example, some may blame the higher-ups in the company for pressuring the employees to reach what were perhaps unobtainable goals or for creating a work environment where these types of illegal actions were condoned. On the other hand, even if an employee is pressured to do something, others may argue that it is ultimately up to the individual as to whether or not he or she is going to take illegal action to reach a goal.

Understanding how individuals attribute responsibility and blame to parties related to a wrongdoing is important in the areas of both law and business. When a wrongdoing occurs, there is often a search for blame and liability with the goal of holding the someone/something accountable and to remove from positions of power those who put the wellbeing of people and corporate capital at risk. In addition to the knowledge gained regarding general attributions and attributions toward businesses, the hope is that the proposed studies will produce a better understanding especially of how jurors assign responsibility, blame, and liability in civil cases where actions with harmful

consequences were conditioned by preceding actions of others. Whereas parties immediately involved or affected by wrongdoing may have a vested interest, jurors are charged with assessing responsibility and blame objectively. In fact, in civil cases they are tasked with doing exactly that – determining how liability should be parsed out amongst the parties involved. The current research will examine these same basic decision-making practices at the step before bringing a specific party to trial. Namely, it will look at how individuals attribute responsibility, blame, and liability to different members of a causal chain.

When an incident occurs, there are often many potential causes, and pinpointing a single cause or a single responsible party can be difficult. Especially the actions of individuals and organizations are impacted by many factors including hierarchical relationships within the organization and standard operating practices for similar organizations. And when wrongdoing occurs within an organization, it is rarely the result of only one person or event. Instead it is frequently the result of a chain of causal events within the hierarchy. Hierarchical causal chains contain elements that, when combined, result in chains of necessity, sufficiency, or some combination of both. The amount of blame attributed to each element in the chain is then impacted by perceptions of choice and foreseeability on the part of the actor, the actor's location within the hierarchy, and the cultural and attitudinal differences of the perceiver.

There are two primary goals the current research seeks to understand: (1) the dynamics of assigning culpability when sequences of events involving multiple human actions cause negative outcomes and (2) the role of individual differences in assessment of culpability. The current study examines the impact of necessity, sufficiency,

foreseeability, and choice on attributions of culpability.

Causality and causal chaining will be examined within the legal and organizational realms. First, the concept of causal chaining will be examined. This section will highlight what are causal chains, hierarchical causal chains, and the role necessity, sufficiency, foreseeability, and choice play in these chains. Second, the concepts of wrongdoing and blame within organizations will be explored, namely white collar crime, how whether or not a wrongdoing has been committed is determined, and the complexities surrounding deciding who is responsible for the outcome. Third, attributions of responsibility/blame will be discussed. This section will look at the concepts of responsibility and blame and how these are related to courtroom decisions, and the cultural and attitudinal individual differences that can impact decision making related to attributions of wrongdoing.

Chapter two will examine the concept of causal chaining. Based on the available literature, this chapter will highlight the nature of different causal chains, especially as they may occur within hierarchically structured organizations. Particular attention will be devoted to the logical concepts of sufficiency and necessary, that is, whether a prior event predetermines a determines a subsequent event, or whether a prior event only enables, but does not in fact trigger, a subsequent event. The first chapter will also examine the importance that foreseeability and human choice play for the attribution of blame and responsibility in the context of a causal chain.

Chapter three explores the concepts of wrongdoing and blame within organizations, and especially white collar crime. Much of the discussion examines how it is determined whether or not a wrongdoing has been committed is determined, and the

complexities surrounding deciding who is responsible for the outcome.

Chapter four examines the similarities and differences between the concepts of responsibility, blame, and liability. This chapter elaborates on how these concepts are related to courtroom decisions and how they can be impacted by individual differences. Chapter five provides information on the current study and its hypotheses/research questions, followed by the study's methods in chapter six. Chapter seven contains the results for the study and is then followed by the discussion (chapter eight) and conclusion (chapter nine).

Chapter 2: Causal Chains

An Overview of Causal Chaining

There is always more than one potential cause for an outcome, and the determination of exactly who is to blame can be quite complex. Yet, much of the research on causal attribution, especially in legal cases, focuses on single-cause situations (e.g., Whitehead & Hall, 1984). The majority of prior research has failed to examine how multiple parties might share responsibility (although some have examined other legal and extralegal factors that may impact attributions, e.g., Hans & Dee, 2002). Many times there is a sequence of events that leads to an outcome, which one can think of as a chain of causes. In these situations, the event that is closest to the outcome is the proximal event/ending entity and the event furthest from the outcome is the distal/initiating entity. Kanekar and Miranda (1998) found that, when the actions of the initiating entity result in the actions of the ending entity, there is a primacy effect for responsibility (i.e., when the proximal entities' actions are dependent on the distal entities' actions, the distal entity receives more blame). In other words, when A causes B, and B causes C, A receives the blame for C. Conversely, when proximal actions are not dependent on distal actions, the proximal entity received more blame (i.e., a recency effect). Therefore, when A, B, and C all happen but are not directly caused by the preceding event, B will be blamed for C.

Similarly, Chu and Shaw (2005) found that people rely on causal chains when explaining meaningful events. When given the opportunity to choose the length of causal chains desired to explain an event, individuals tended to prefer chains of causes over one proximal cause. Causal chains more frequently ended with dispositional (internal) than situational (external) causes (Chu & Shaw, 2005), presumably because internal causes are

seen as more influential in determining an event's outcome (Brickman, Ryan, & Wortman, 1975). Similarly, when examining situational versus dispositional attributions and proximity to the outcome, distal entities' actions were more often attributed to circumstances (e.g., a business competing with other businesses) and proximal entities' actions more often attributed to dispositions (e.g., reckless driver; Gold & Shaw, 1998).

Human action and foreseeability. Human action plays an important role in the assessment of blame and responsibility, with voluntary human action being deemed more causal than non-human actions (McClure, Hilton, & Sutton, 2007). Previous studies have used opportunity chains (see Table 1 for a description of this chain type) to compare the causality, responsibility, and blame attributed to a combination of human and non-human actions in a causal chain (e.g., Hilton, McClure, & Moir, 2016; McClure et al., 2007). In these studies, the comparison is between these non-human events (e.g., lightning strike) and voluntary human actions (e.g., cutting wiring to an alert system), and research finds that the human action is typically considered a sufficient cause of an event. When an event can be traced back to a human action, people tend to treat this action as the cause of the event, and they do not continue their search for additional causes. This may seem peculiar because, it is easy to see that human decisions and actions are motivated by distal causes that evoked them. In other words, the general assumption that "people do things for a reason" should prompt for the causes of a human action itself.

There have not, however, been investigations of causal attributions for two human actions that comprise a causal chain. It is reasonable to believe that, when there are two human actors involved, the finding of causality resting on one human action is not enough of an answer. Rather it needs to be determined what prompted or motivated an

actor to act in a certain way. One such factor may be the foreseeability of the outcome.

Hilton and colleagues (2016) argue that voluntary human actions are deemed more causally important when the actor has greater foreseeability. When the actor was in a position to know what would occur as a consequence of his or her action, the actor is more likely to be held responsible, be blamed, or merely seen as the cause of an event (Hilton et al., 2016; but see e.g., Fincham & Jaspars, 1983). Foreseeability is related to how individuals see the actions of others, and these actions can be divided into voluntary and deliberate actions.

People's actions can be voluntary and not deliberate if they willingly engaged in an action but did not have the foresight or intent to cause a negative outcome. For instance, a person may turn on a light switch (a voluntary action) but did not know that the wiring was faulty and that turning the switch would start a fire. Conversely, the same action can be voluntary and deliberate if they did have knowledge about the negative outcome (e.g., a person turns on a light switch [voluntary action] knowing that the wiring was faulty and that a fire would start [deliberate action]; Hilton et al., 2016). Voluntary and deliberate actions are deemed more causally responsible and blameworthy than voluntary and non-deliberate actions. Similarly, involuntary actions (or actions in which a person had limited or no other choice) should be viewed as less causally responsible and blameworthy than their voluntary counterparts. This hypothesis will be tested in the present research.

Another factor that can impact ratings of actor causality, responsibility, and blameworthiness is the actor's intentionality (e.g., Malle, 1999; Malle & Knobe, 1997). It is suggested that there are several steps needed to determine intentionality, namely: (1)

the actor *desired* the outcome, (2) the actor *believed* the outcome would happen as a result of his actions, (3) the actor had the *intention* to do the action, (4) the actor had *awareness* that he was performing the action while doing so, and (5) the actor had the *skill* required to perform the action reliably (Hilton et al., 2016). Hilton and colleagues (2016) found that awareness (i.e., foreseeability) impacted the ratings of deliberateness of the action, the actor's desire for the outcome, and the actor's belief that the outcome would be the result of his actions. Conversely, the voluntariness of the action was not affected by foreseeability. It is worth noting, however, that these studies examined actors who had the intent to bring about a negative outcome (e.g., cutting wiring to an alert system). By contrast, the current works examine something closer to the concept of negligence, whereby actors do not necessarily act with the intention of causing harm, even though harm ends up being the result of their actions.

Determining the importance of causal elements. Hart and Honoré (1985) noted the importance of two key contrasts when determining which elements of a causal chain individuals cite when relaying their causal explanations to others: (1) what is normal vs. abnormal and (2) what is free and deliberate human action vs. all other conditions. Causes that are abnormal and deliberate human actions are seen as more important causes than their counterparts. What people consider normal and abnormal is dependent on their assumptions and perceptions, and will not be the same for all individuals (Hilton, McClure, & Slugoski, 2005). It is suggested, however, that if there is intentionality behind the abnormal behavior, it is more likely to be noted as a key causal factor (Hart & Honoré, 1985).

Counterfactual mutability, the notion that people can often imagine an alternative

outcome given identical starting conditions, is a key reason for why abnormality and intentionality are important factors in causal attributions. There are several different suggestions as to how mutability impacts attributions. First, Giroto and colleagues (1991) discussed the importance of the ease or difficulty of imagined alternatives (see also Hilton & Slugoski, 1986). These authors note that, when individuals are able to easily think of alternative actions that would have undone an outcome (e.g., a highly mutable element), the action that occurred (and not the imagined alternatives) should be deemed a more necessary cause in the chain compared to other elements.

Second, the covariance model of attribution by Kelley (1973) seeks to provide a more encompassing approach than Giroto and colleagues, because it focuses on the co-occurrence of causes with their consequences. Because the focus of this model is on covariation, it includes elements of both the necessity and sufficiency of a cause. The idea that both the necessity and sufficiency of a cause imply covariation is specifically articulated in a number of statistical models of causal reasoning, including the probabilistic model by Spellman (1997). All else being equal, when a cause is sufficient, the consequence is present every time the cause is present; conversely, when a cause is necessary, the consequence is absent each time the cause is absent. Specifically, necessary and sufficient causes are likely to be selected as causal attributions for an outcome. This results in deliberate and voluntary actions being explanations because of their covariation with outcomes.

Third, elements in a causal chain can be viewed as more or less essential to bringing about an outcome as a result of how they relate to other elements in the chain (Spellman, 1997). If an element in a causal chain increased the probability of the outcome

occurring above and beyond that of the other elements in the chain, it will be identified as a causal element. Fourth, and finally, intentional actions are viewed as being more “sufficient in the circumstances” (Heider, 1958; Mackie, 1974; McClure & Hilton, 1997) than non-intentional actions. Put differently, within the context of existing conditions, intentional human actions is typically seen as the critical element that altered the course of events. This resulting in them often being preferred as explanations.

Necessity and Sufficiency

To date the most sophisticated theory concerning attribution in the context of causal chains was proposed by Hilton, McClure, and Slugoski (2005; see also Hilton, McClure, & Sutton, 2010). Their analysis capitalizes on the concepts of necessity and sufficiency as basic elements of causal reasoning (e.g., Thompson, 1994). For A to be a necessary cause of B, the fact that B occurred implies that A occurred. The mere fact that A occurred, however, is not a guarantee that B occurs; rather, the only firm conclusion to be drawn is that, if A did not occur, it is certain that B did not occur as well.

For A to be a sufficient cause of B, the fact that A occurred implies that B occurred (although there may be another event C that could cause B). The mere fact that B occurred, however, does not imply that A occurred. The concepts of necessary and sufficient causes of an outcome are directly related to the differences between notions of ‘causing’ and ‘enabling’ (Hilton et al., 2005). Specifically, if A causes B, A is sufficient to bring about B. Conversely, if A enables B, A is necessary to bring about B. Sufficiency means that A brings about B regardless of what other factors are present or absent. Necessity means that B can only occur in the presence of A, but the presence or absence of other factors determines whether B actually emerges. Necessity and sufficiency are

important concepts related to the determination of causality and are frequently cited in the research as key elements in deciding which elements of a causal chain are most attributed to an outcome. Individuals, in their causal reasoning, tend to be very much driven by sufficiency rather than necessity (e.g., Hilton et al. 2010; Mandel & Lehman 1998). In other words, when a person's actions were sufficient to bring about an outcome, they will be held more culpable than when their actions were necessary. It is not surprising that, within the legal arena, necessary and sufficient conditions are used to determine causality and liability for an event (Greene & Darley, 1998).

Types of causal chains. Hilton and colleagues (2005) describe five types of causal chains: temporal, coincidental, unfolding, opportunity chains, and pre-emptive. *Temporal chains* refer to situations where multiple events are necessary to cause an outcome, but the events are temporally interchangeable and the distal event does not constrain the proximal event (Miller & Gunasegaram, 1990). *Coincidental chains*, conversely, refer to situations where there is a direct causal link between events (i.e., A causes B, B causes C – A is necessary for B, B is necessary for C) and the distal event does constrain the proximal event (Wells et al., 1987). For coincidental chains, the order of the events is switchable in time. *Unfolding chains* can be thought of as a stronger version of a coincidental chain. These chains have a direct causal link between events (the order of the events, however, is not switchable in time) and the distal event strongly constrains the proximal event (Hart & Honoré, 1985; Hilton et al., 2003). These chains can be thought of as sufficiency chains. *Opportunity chains*, contrary to the previous chains discussed, include the elements of both 'enabling' and 'causing' an event to happen. Specifically, with opportunity chains, A enables B, B causes C (i.e., A is

sufficient for B, B is necessary for C; Hart & Honoré, 1985; McClure et al., 2003). The events in this chain are not switchable in time and the distal event enables the proximal event. These chains are a combination of necessity and sufficiency chains. Finally, *pre-emptive chains* refer to situations where A is independent of B, B causes C. In this chain, both A and B independently would have led to C, but the actions of B took effect before the actions of A (Mandel, 2003). Events in a pre-emptive chain are switchable in time and the distal event precedes the proximal event.

Table 1. Types of causal chains

Types of causal chains

1. Temporal chains	A and B occur, resulting in C – the order of A and B does not matter
2. Coincidental chains	A causes B, B causes C – the order of A and B does not matter
3. Unfolding chains	A causes B, B causes C – the order of A and B does matter
4. Opportunity chains	A enables B, B causes C – the order of A and B does matter
5. Pre-emptive chains	A occurs independent of B, B causes C – both A and B could have caused the outcome, C

Hierarchical Causal Chaining

Human action occurs within the context of social structures often with roles, norms, and expectations. One such social structure is organizations, and more specifically the hierarchy that exists within an organization. Sanders and colleagues (1996) note that, within organizations, attributions of responsibility are determined by examining both the actions of an individual/entity (i.e., deeds) and their job-related duties (i.e., roles). In hierarchical structures, deed-based responsibility is greatest at the bottom, meaning these individuals can use role-based excuses when accused of wrongdoing. For example, people actually committing the wrongdoing can contend that they were only acting on the

orders of their superiors. The opposite is true for individuals at the top of the hierarchy; as one goes up the hierarchy, role-based responsibility increases and these individuals can use deed-based excuses to contend that they could not have foreseen their employee's actions and that they specifically did not perform the task (Sanders et al., 1996). In their research, Sanders and colleagues examined a variety of different scenarios in which they manipulated the mental state of the actor, their position within the organizational hierarchy, and the actor's autonomy in committing the act, to examine these concepts.

Once it has been determined that a wrongdoing has occurred, the decision about who is to blame must be made. A particular instructive concerns wrongdoing in the context of larger social entities (such as governments or corporations). One of the major questions that arises when examining white collar crime is whether or not organizations (or entities) can be considered 'actors' when it is people within them who are actually acting (Vaughan, 1992). Relatedly, when determining responsibility, individuals must determine if the motivation of the actor was to further his or her own interests (occupational crime) or those of the organization (corporate crime; Clinard & Quinney, 1973). Theories for white collar crime can be developed around either motivation orientation, but it is common to focus on the latter and how situational characteristics impact the actions of an individual (e.g., Vaughan, 1992). For example, the Theory of Organizational Misconduct (Vaughan, 1983) emphasizes the impact of a competitive environment, organizational opportunities to violate, and a lax regulatory environment.

As an organization grows in size, the complexity of relationships increases and thus the attribution of responsibility become more difficult (Vaughan, 1992). For example, in smaller companies with few employees, the agency relationships are

confined to primarily two levels (i.e., the boss and the employee, with each only being either the principal[*boss*] or the agent[*employee*]). As company size grows, each person has multiple agency relationships and may find themselves acting as both a principal and agent simultaneously, thereby increasing the complexity of determining responsibility. Another element to consider is the impact of the actor's location within the organizational hierarchy. The higher up a person is in the hierarchy, the more responsibility will be attributed to the organization as a function of his or her actions (Sanders et al., 1996).

In addition to the complexity that exists within the organization itself, there is also an argument that the actions of an individual need to be situated within the context of the larger societal social structure (Vaughan, 1992). Individuals do not act in a vacuum; they are influenced by the organizational environment of their business, which is influenced by the larger culture of all similar businesses in the industry, which in turn is influenced by the overall governmental and societal environment. All of these different types of influence are important when determining culpability for an action and can act to mitigate or aggravate the amount of responsibility attributed to an individual or entity. Ermann and Lundman (1978) contend that other, similar organizations have both the power and responsibility to control the deviant acts by other organizations (i.e., a form of inter-industry policing).

Cialdini and Goldstein (2004) note that, within organizations (arguably regardless of culture), the norm of deference to authority is deeply ingrained. Others (e.g., Ashforth & Anand, 2003; Brief, Buttram, & Dukerich, 2001; Darley, 2001) have suggested that those in lower positions of power within the organizational structure often commit acts of deviance at the behest of their superiors without necessarily considering the

consequences.

The role of culture within hierarchical organizations. Even though there may be universal norms within organizations, there are many culturally defined norms, and individuals' responses to acts of wrongdoing within an organization can differ based on their location within the individualist/collectivist spectrum. In light of this, there is a growing field of research pertaining to cultural differences in attributions of responsibility within a hierarchy. It is also important to remember that individuals and organizations both have, and are influenced by, a structural component (i.e., horizontal and vertical relationships within the organization) and a cultural component (i.e. individualism/collectivism and egalitarianism/hierarchicalism continuums; Sanders et al., 1996).

A common finding in the literature is that individuals with a collectivistic orientation blame the leaders in organizations for both their actions and the actions of their company, subordinates, and fellow group members more than individuals with an individualistic orientation (Zemba & Young, 2012; Zemba, Young, & Morris, 2006). Interestingly, Tetlock, Self, and Singh (2010) found that, when peer pressure is offered as an excuse for an action, Americans attribute less blame to the individual, while Singaporeans maintained their blame for the individual and added on blame to the peers. This indicates that excuses made to mitigate responsibility, and how others react to them, are culturally bound. This could be interpreted as Americans treating peer pressure as a sufficient cause for the outcome, whereas Singaporeans did not see it this way.

Another study by Sanders and colleagues (1996) found several significant differences between Japanese and American participants. Specifically, Americans hold each individual actor more responsible than the Japanese, regardless of position within

the hierarchy. Moreover, when looking at the responsibility of the organization, the Japanese attribute approximately equal responsibility to the company as Americans (something that is not aligned with Japanese law because they rarely prosecute corporations and focus instead on prosecuting individuals). They also note that in situations with causal ambiguity, there is a decrease in responsibility for all actors regardless of cultural location.

Therefore, when there are more links in the causal chain, responsibility for all entities is mitigated because responsibility is spread amongst everyone and cannot be firmly assigned to just one entity. The exception to this is if you can show that the organization's policies/operations lead to acts of wrongdoing, then the organization is held more responsible (Sanders et al., 1996).

Chapter 3: Assessing Wrongdoing and Blame within the Context of Organizations

What Is and Is Not Deemed a Wrongdoing

Wrongdoings occur in a variety of different settings, but a prime example for the importance of determining exactly “who did what” (and the focus of this dissertation) is found by examining wrongdoing within an organization. In these situations, it is not always just the individual or just the organization that are found responsible (i.e., the actions of an individual may or may not be interpreted as an act of the organization). Especially in complex organizations with links between multiple employees at different levels in a hierarchy, there may be multiple individuals who might have been involved in bringing about a certain objectionable outcome.

When examining wrongdoing within an organization, there are two main topics of interest. First, there is the question of attributing blame to any individual actor who falls somewhere within a causal chain. Second, there is the question of attributing blame to an organization to which an individual belongs; in particular, one may ask whether the organization influenced the individual’s actions in some way or if the individual acted in spite of the organization’s norms and actions. A discussion of wrongdoing within an organization must first begin with a brief overview of white collar (e.g., corporate) crime.

An Examination of White Collar (e.g., Corporate) Crime

The term ‘white collar crime’ encompasses a variety of types of crime, but generally these crimes are those that are perpetrated by individuals with higher socio-economic status and tend to be non-violent (Rosoff, Pontell, & Tillman, 2010). Many white collar crimes occur within organizations. The advent of an ever-expanding global economy will only lead to an increase in incidence of state-corporate crime as a result of

varying amounts of regulation and state control in the economy amongst nations (Mullins, 2006). In its most basic form, state-corporate crime can be envisioned as the interplay of a private corporation and the government in either acting to commit a crime or not acting to stop one (Kauzlarich, Mullins, & Matthews, 2003). For example, the Japan state has more control and involvement with Japanese businesses than the corresponding relationships in the United States, but their regulatory standards are different and may be more or less stringent depending on the industry (Sanders et al., 1996). Regardless of the cultural differences, in most societies corporations and governments are now functionally interdependent (Kramer, Michalowski, & Kauzlarich, 2002). Intertwining interests link these two entities, often resulting in negative perceptions from the public; businesses are viewed as being more concerned with profits (and a precursor to profits, positive public relations) than with preventing harm, and government regulatory committees are under pressure to not stifle economic growth and thus are often seen as lax in their duties (Mullins, 2006).

The Complexities of Determining Whether or not Something Constitutes a Wrongdoing

A common question within the field of criminology is “What makes a behavior or action just ‘distasteful’ or ‘wrong’ as opposed to ‘criminal’?” There must be someone, or rather a group of people, who dictates what is and is not normative behavior, and then which of those non-normative behaviors should be considered crimes. Organizational deviance can refer to deviance within an organization or deviance done by an organization. When examining acts of wrongdoing within an organization, however, it is important to note that what is and is not considered deviant will vary from one

organization to the next (Ermann & Lundman, 1978).

Ermann and Lundman (1978) contend there are four aspects that must be present for an act to be considered organizationally deviant (i.e. deviance done by an organization). First, the act needs to be counter to the norms held by those outside of the organization (i.e., outsiders find the act deviant). Second, the act is supported within the organization (either within a subset of the organization or the organization as a whole). Third, the act is supported and known by the organizational elites (e.g., supervisors, CEO). Finally, new members/employees are socialized to act in this accepted deviant way. Baker and Faulker (2003) discuss how social networks can lead to the diffusion of fraud; similarly, this same assumption could be used to examine the diffusion of norms about acceptable behavior within an organization and between related organizations. This discussion about societal and organizational norms points to the larger question about who gets to make these determinations; it is suggested that this group is typically the socio-economic elite within an organization or society (Kauzlarich et al., 2003).

Impact of the role of power and how it may affect the definition of wrongdoing. Kramer and colleagues (2002) note that it is the political and economic elites who determine what is and is not considered a wrongdoing or crime. When making this determination, they act in a manner that is aligned with (and will not threaten) their interests. This conceptualization of the construction of normative behavior is well aligned with Lukes' (2005) second dimension of power – often thought of as rule-making power (Gaventa, 1980). In terms of the current question about the determination of what constitutes a wrongdoing, this dimension holds that those who determine wrongdoing (i.e., those who make the rules by which people live) can define them in a way that gives

advantage to the rule crafters and disadvantages to all others. In other words, those in power dictate the normative and legal actions of the group (with their own interests put first) and all others must comply or their actions will be deemed deviant (at least) or criminal (at most).

There is a second way in which those in power influence normative perspectives of crime/deviance, and this relates to Lukes' (2005) third dimension of power – often thought of as ideological power (Gaventa, 1980). This dimension holds that those in power have the ability to shape the other members of the group's thoughts and desires. Through acts such as having lower powered people participate in disadvantaging themselves, those in power gradually make it so that those not in power do not desire to challenge the elite for power (Gaventa, 1980). One example of this in our current society can be seen when examining Benforado's (2010) discussion of Americans lack of desire to blame businesses or government for certain problems. He shows that Americans do not deem certain actions criminal (e.g., marketing to encourage obesity) as a result of indoctrination to view the power of personal agency as primary and the power of the corporations/government as secondary, even to their own detriment.

Kauzlarich, Matthews, and Miller (2002) found social power related inequalities when examining the actions taken to protect victims of state-corporate crimes. Specifically, when victims are of lower status (i.e., have less economic and political power), there is little pressure to correct problems or instate new regulatory actions to protect them. Conversely, when there are high status victims, regulatory committees and business are forced to take action, even if it is just symbolic. It is worth noting, however, that the state can give in to the interests of the non-elites/non-ruling class in order to

preserve the state and its goals (Kramer et al., 2002).

The Complexities of Determining Who is Responsible for a Crime

The different legal implications of holding an individual vs. entities/ organizations responsible for a wrongdoing. The determination of whether a specific individual, the organization as a whole, or some combination of the two should be held responsible for an action can be complicated. Hamilton (1978) notes that when determining attributions of responsibility, it is important to consider both the actions of the individual and the expectations of how s/he was supposed to act. Within a corporation, the agency relationship (i.e., the direct chain from supervisor/principal to worker/agent) is often confounded within a series of other agency relationships (e.g., a worker may have several bosses; Sanders et al., 1996). Also, a supervisor's control over his or her employees is not absolute. This situation allows the supervisor to contend that the employee did not act as instructed, and the employee to contend that s/he was merely following orders and thus should not be held responsible for his or her actions.

When entities are held responsible for an action or event, punishment looks different (e.g., sanctions, changes in regulations) than when individuals are held responsible (e.g., loss of rights/liberties, job, money). Sanders and colleagues (1996) note that when determining whether to hold an individual or an organization responsible for an action, it is important to recognize the limitations associated with punishing organizations. Specifically, organizations (unlike people) cannot be imprisoned, and fines will only do so much to deter future bad acts. It is arguable that actions taken toward the individual have a greater impact on that person than actions taken against an organization. If the organizational sanctions are drastic enough, however, they could lead

to a dismantling of the entire organization, thereby impacting a much larger number of people. There are several tools individuals can use to aid in their determination of responsibility and culpability for an act, one such tool is the complicity continuum.

Complicity continuum. Kauzlarich and colleagues (2003) suggested the concept of a complicity continuum to explain the various types of state-related crime. This continuum proposes four different types of crimes based on a combination of two variables: (1) whether the crime was one of commission (i.e., active, purposeful, conscious behavior) or omission (i.e., failure to act), and (2) how these actions relate to the state's goals: explicit (i.e., relating to specific state goals or the elite ideological interests) or implicit (i.e., tangentially relationship between the crime and state goals). Thus, the combinations (in order of least to most responsibility attributed to the state) are: omission-implicit, omission-explicit, commission-implicit, and commission-explicit.

The use of this continuum allows for a broadening of the idea of state-corporate crime to include a wider variety of misdeeds that some may not necessarily deem 'crimes' (e.g., inequality). The complicity continuum can also provide a context for examining the actions of not only states, but also organizations. When an individual within an organization commits an act of wrongdoing, those charged with determining responsibility of the individual as compared to the organization can examine the nature of the actions of the organization (i.e., commission or omission) and whether the individual's actions were directly related to advancing the goals primarily of the organization (i.e., explicit) or him or herself (i.e., implicit).

When using this continuum, there are two important factors to consider. First, Kauzlarich and colleagues (2003) note that when examining state crimes, it is vital to

consider both the sociohistorical context and the stage of state development (e.g., how close is the state to obtaining its goals). This can be transferred to organizations by examining the businesses sociohistorical context (e.g., its relation to other businesses, organizational culture) and its stage of development (e.g., age of the company and growth potential). Second, a specific crime does not have to fall under only one of the four categories; often a single crime can fall into multiple categories. This often complicates attempts to determine attributions of responsibility. When attributions are reached, however, individuals can have increased confidence in the accuracy of their decisions.

When attempting to assess wrongdoing and blame within an organization, there are several different factors to consider. First it must be determined whether or not a wrongdoing occurred, followed by examining the different mitigating factors that may have been related to the wrongdoing. Once it has been determined that a wrongdoing has occurred, then one must determine how broad they want to make their litigation and understand the implications of litigating against an organization versus a person. In addition to these considerations, one must also examine the concept of how individuals reason about events occurring, which is discussed in the next chapter.

Chapter 4: Reasoning in Causal Chains and Individual Differences/Pre-existing Beliefs Impact on Attributions

Examining the concepts of responsibility and blame

Frequently, the words ‘responsibility’ and ‘blame’ are used interchangeably without acknowledgement of the potential problems that could arise. It is common, and somewhat understandable, for lay people to not differentiate between these terms (e.g., Kanekar & Miranda [1998] note that often moral and causal attributions are combined), but even researchers do not always make a firm distinction between attributions of blame and responsibility (e.g., Malle, Guglielmo, & Monroe [2012] include Weiner’s [1995b] attribution of responsibility model in their discussion of models examining blame). When blame and responsibility are treated as semantically equivalent, this communicates that no difference exists. However, other theorists (e.g., Mantler, Schellenberg, & Page, 2003) show that these are two distinct concepts that should be examined separately. Mantler and colleagues (2003), for example, found that individuals are able to differentiate between the two concepts of responsibility and blame, with blame being related to behavioral intentions, emotions, and pre-existing social attitudes. Further, their results suggest that attributions of responsibility and blame are part of an overall attributional hierarchy, in which blame is at the top. In other words, their findings indicate that a person must first make a responsibility attribution and then if someone is found responsible then a blame attribution can be made.

Differences and Similarities Between Attributions of Responsibility and Blame

There are several different theoretical models related to how individuals arrive at attributions of responsibility and blame. The two main models discussed are Alicke’s

culpable control model of blame and Weiner's model of attribution of responsibility.

Malle and colleagues Step Model of Blame will also be briefly discussed (see Figure 1 for a side-by-side comparison of the models).

The culpable control model of blame (CCM; Alicke, 2000) posits that individuals combine both information about the amount of control an individual had in a situation and their spontaneous judgment evaluations of the situation when arriving at a blame decision. There are three elements of control considered: (1) behavior control, (2) causal control, and (3) outcome control. First, behavior control relates to the intent of the actor; specifically, did he or she act in a purposeful and knowingly manner? Second, causal control relates to whether or not the actor was explicitly the cause for the outcome. Finally, outcome control relates to the amount of foreseeability of the outcome based on the actions. Evaluative judgments are made in relation to the actor (actions, motives, character) or the consequences of the actor's actions (Alicke & Rose, 2012). The inclusion of these evaluations demonstrates that blame is a subjective analysis that is influenced by the perceiver's values, beliefs, and emotional reactions (Alicke, 2000). These elements can be mitigated by excuses and justifications (Alicke, 2000). To the extent that an actor can provide these, their amount of blame will be reduced.

Weiner's model of attribution of responsibility (1995b) posits that, after an event occurs, individuals first search for the causes of an event (e.g., did the event occur as a lack of effort or ability and was the actor personally responsible for the event?). The answer to these causal questions will determine whether or not the actor is deemed responsible for the event. Once a responsibility decision has been made, then an emotional reaction occurs (either anger or sympathy), resulting in a behavioral response (i.e.,

punishment or helping). With this foundation laid, focus will now turn to the examination of the differences and similarities between the conceptualization of responsibility and blame.

There are good arguments for why the differences in the attributions of responsibility and blame outweigh their similarities. One of the key differences is what is implied by the words; 'blame' is inherently negative, whereas 'responsibility' is a more neutral term and can be applied to both positive and negative events/actions. For example, a girl can be responsible for cleaning the car (a positive event) and for scratching the car's paint (a negative event), but one would only blame her for the scratch. Weiner (1995a) notes that blame, as opposed to responsibility, is determined by the significance of the consequences of an event. Similarly, Alicke (2000) notes that the inclusion of an element of social or moral wrongdoing in blame is the key element differentiating it from responsibility. When examining the concept of responsibility within the legal context, it is possible for an individual to be held legally responsible for an act without committing social or moral wrongdoing resulting in attributions of blame (e.g., strict liability).

An additional difference is that normative and rational decision-making criteria can be applied to situations to determine responsibility, whereas the construction of blame is inherently confounded with motivational biases and cognitive errors (Alicke, 2000). A multitude of other differences between responsibility and blame start to appear once the element of affect is considered. The majority of responsibility models do not include this element, with the noted exception of Weiner's (1995b) model of attributions of responsibility (Alicke, 2000). Once in the realm of blame-based models, there is

debate over the sequence of arriving at attributions of blame.

Arguably, theoretical models of blame can be divided into two groups: those in which the blame judgments occur after the intentionality judgments (blame-late models) or those in which the blame judgment occurs before the intentionality judgments (blame-early models; Malle et al., 2012). Blame-late models (like Weiner's) tend to argue that the elements of causation of the event, intentionality, and the ability to control the outcome are all primary and critical in assessing blameworthiness (Malle et al., 2012). In contrast, blame-early models (like Alicke's [2000] culpable control model of blame), while often relying on similar intentionality criteria as blame-late models, contend that individuals rely on their initial judgments of blame to validate their blame when examining the other evidence.

Blame late models establish intentionality and control prior to making an assessment of blame—with the tacit assumption being that intentionality and control are variables that pertain primarily to the concept of responsibility. Blame-early models operate such that individuals seek to validate an individual judgment of blame by perceiving intentionality and control in a way that validates their initial judgment of blame. Malle and colleagues, when discussing their Step Model of Blame, suggest that blame-late models are a more accurate representation of the cognitive processes surrounding blame (indicating that individuals consider intentionality first and then assess blame); however, other researchers (e.g., Alicke, 2000; Alicke & Rose, 2012) contend that assessments of blame occur before or in concert with those of intentionality. Currently, there is no conclusive evidence that would favor one type of model over the other one. Also, there is always the possibility that both processes occur at the same time,

such that initial blame motivates people to perceive causal evidence that is consistent with the initial blame, and that people are drawing conclusions about blame based on their perceptions of control and intentionality.

In the literature on blame, there is often a differentiation between cause and blame (Lagnado & Channon, 2008). Blame can only be attributed to an agential unit (e.g., human), but almost anything can be seen as a cause. For example, Lagnado and Channon suggest that a rock can be the cause of damage to your car, but it cannot be blamed for the damage to your car. In this scenario, it might seem plausible to use the phrases ‘cause of’ and ‘responsible for’ interchangeably; however, Weiner (1993) contends that responsibility is not considered a causal attribution, meaning that the two terms are distinct.

Although these attributions of blame and responsibility are different, there are similarities between these concepts. The concepts of responsibility and blame (and their respective models) tend to overlap the most with regard to their implication with regard to intentionality/causality. For example, it is common for researchers in both areas to study the impact of whether the causal locus of control was internal or external, whether a cause is stable or unstable, and whether an actor is able to control a cause (e.g., Weiner, 1991; Alicke & Rose, 2012).

In examining the relevant research, it appears that the emotional/evaluative component is an important element in determining both responsibility and blame (although it is not always accounted for in all models). Weiner’s model explicitly includes the impact of emotional reactions when determining responsibility, whereas Alicke’s model is less obvious about the role of emotions. As noted by Malle and

colleagues (2012), the differences in the sequence of events may suggest that the important distinction between these two attributions is when the emotional/evaluative element occurs. For attributions of responsibility, which are arguably more rational-based, the affective component is useful at a later point in the attribution process to inform the already formed basic belief, whereas for attributions of blame, the affective component is useful at the beginning of the process to impact all further beliefs about the event.

How Attributions of Blame/Responsibility are Related to Courtroom Decisions

According to Lempert and Sanders (1986), that criminal legal decisions often involve moral connotations, whereas civil decisions often are more of a tool for resolving conflicts that individuals cannot settle privately. This suggests that attributions of blame may be more common in criminal trials and attributions of responsibility may be more common in civil trials. Also (similar to the discussion of models of responsibility and blame), causation is a vital element in civil torts, especially when determining liability where an attribution of responsibility (and not blame) is all that is required. When causality can be clearly (as opposed to ambiguously) linked to an individual/entity, attributions of responsibility increase (Schmidtgoessling, 1978; Shultz, Schleifer, & Altman, 1981). Likewise, when there is an intervening cause (i.e., something that occurred between the initial behavior and the outcome), attributions of causality and blame decrease (Fincham & Shultz, 1981). In addition to the strict causal elements, research consistently finds that a variety of factors, both jury- and case-specific, impact juror courtroom decisions (e.g., Bornstein & Rajki, 1994).

Impact of case factors and juror characteristics. One of the more prominent

findings related to case factors is that when the severity of the action is increased, the amount of blame also increases (especially for groups in ambiguous culpability situations; Laufer, Gillespie, McBride, & Gonzalez, 2005). Within civil disputes, jurors must assess wrongdoing by determining whether someone is considered liable for another's damage and, if so, what compensation (damage award) the offending party has to provide to the injured party to rectify the wrongdoing. Damage awards tend to be positively related to the severity of the victim's injuries (e.g., Vidmar, 1995); however, jurors tend to overcompensate for relatively minor injuries and undercompensate for more severe ones (e.g., Dewees, Duff, & Trebilcock, 1996). Relatedly, sympathy impacts attributions of causality; greater sympathy for the plaintiff, or lesser sympathy for the defendant resulted in finding the defendant more responsible (e.g., Bornstein, 1991; 1994). Feigenson, Park, and Salovey (2001) found that emotional arousal (e.g., anger) mediated the relationship between blameworthiness and fault, but not between severity of injury and damage awards, indicating that the impact of emotions varies based on which decision is being made.

The impact of the severity of the case may also be related to individual juror characteristics. For example, Shaw and McMartin (1977) found that individuals with high personal and high situational relevance to the case had decreased attributions of responsibility of a severe accident compared to a mild one. Personal relevance is defined as how much personal similarity (e.g., gender, appearance, values) there is between the individual evaluating and the actor. Situational relevance is defined as how much similarity there is in terms of physical circumstances between the individual evaluating and the actor. Another finding Shaw and McMartin (1977) note is that individuals with

low personal and high situational relevance had increased attributions of responsibility in severe accidents. The overall findings of this study provided evidence that regardless of the severity of the crime, situational relevance is a key determinant of responsibility attributions.

Another factor impacting juror decision making relates to focusing on aspects of the victim. Jurors tend to focus on the severity of a victim's injury when assessing legal responsibility (Hans & Dee, 2002). Hans and Dee (2002) contend that this predilection is a result of both individual factors (e.g., an individual's proclivity to believe in a predictable and just world) and societal factors that influence individual beliefs. Some of the societal factors include the impact of individualism (the focus on the person and not the external factors) and media framing of civil lawsuits (e.g., Benforado, 2010).

Feigenson, Park, and Salovey (1997) examined the impact of victim blameworthiness, finding that when the victim can be seen as somewhat blameworthy, jurors tend to exaggerate that blame, resulting in decreased damage awards. Jurors tend to believe that hostility and negative stereotypes about groups to which the defendant belongs (e.g., race, occupation, gender) drive the plaintiff's actions (Lupfer et al., 1985). These actions are viewed as being tied to internal attributes (e.g., attitudes, motivations) much more than situational factors, resulting in an anti-plaintiff bias in both attributions of responsibility and subsequent verdicts.

Impact of Individual Differences and Pre-existing Beliefs on Attributions

Research on how legal decisions are made, especially on the part of jurors, has identified numerous individual difference characteristics and beliefs that can impact attributions (e.g. Carlson & Russo, 2001; Kimmelmeier, 2005; Miller, Wood & Chomos,

2014). Among the many cognitive and attitudinal dimensions identified, our focus is on attributional complexity as well as social and political beliefs, which have been shown to influence juror decision making. We also examine attitudinal dimensions that are relevant to civil torts. The consequences of individual differences in the context of reasoning about causal chains, however, have never been examined before.

Impact of attributional complexity (e.g., processing) on attributions.

Attributional complexity as an individual difference characteristic varies from person to person (Fletcher et al., 1986). Throughout the attribution literature, the role of motivation and ability are noted as being vital to the creation of complex attributions (e.g., Weiner, 1995b; Fletcher et al., 1986). In situations where individuals are able and motivated to arrive at ‘correct’ attributions, they are more likely to take the time to consider a wide variety of causal determinants thereby making complex causal attributions (Fletcher et al., 1986). Indeed, individuals who are attributionally complex are more likely to consider a broader range of causal factors, are less likely to be swayed by superficial characteristics of the evidence and its presentation, and thus less susceptible to bias (Fletcher, Rosanowski, Rhodes, & Lange, 1992; Lassiter et al., 2005; Pope & Meyer, 1999). In keeping with this prior research, we expect that focal events should be equally salient to all, but there should be disagreement between those high and low in attributional complexity about less focal events. Specifically, individuals high in attributional complexity will be more likely to take the actions of distal entities into consideration when arriving at their attributional judgments. Individuals low in attributional complexity might be more likely to consider the most proximal human action a sufficient cause, whereas individuals high in attributional complexity look at

human action itself as conditions and thus would be more likely to consider the actions of both the proximal and distal actor.

Impact of attitudes toward damage awards and civil litigation on attributions. There is a prevalent belief that a litigation crisis exists in the United States in that too many people sue each other over minor disputes, with juries awarding damages that are out of proportion (Hans & Lofquist, 1994). Specifically, individuals with a critical disposition toward damage awards (i.e., think they tend to be too high) or those who are skeptical of civil litigation (i.e., think there is too much litigation) can be expected to award lower damages and be less inclined to suggest litigation (Greene et al., 1991; Hans & Lofquist, 1992). Conversely, those who believe that plaintiffs regularly receive damage awards of a million dollars or more tend to award higher damages (Greene et al., 1991). Hans (2014) suggests that litigation crisis perceptions are more influential in shaping damage award decisions than individuals' attitudes towards business (i.e., pro- or anti-business bias). In the present research we examine the possible influence of civil juror litigation crisis attitudes (Hans & Lofquist, 1994) on the factors that participants take into consideration when arriving at attributions in a civil case.

Impact of political beliefs and general value orientation on attributions. Political ideology and beliefs pertaining to right-wing authoritarianism (e.g., submission to legitimate authority and social norms; Altemeyer, 1998) impact decision making, especially in relation to cases involving both individuals and businesses. Conservatives tend to be more pro-business (e.g., Heinze, Uhlmann, & Diermeier, 2014) and therefore, compared to their liberal counterparts, may be more inclined to attribute blame and responsibility to individual actors rather than businesses. Conversely, individuals higher

in right-wing authoritarianism tend to be more punitive and, therefore, might be more likely to seek litigation and award harsher punishments, especially toward larger businesses (Altemeyer, 1998; Hans & Lofquist, 1994). It is also logical that individuals who like small or big businesses more, should hold them less culpable compared to those who do not like them.

Impact of independence/interdependence on attributions. Kanekar and Miranda (1998) examined causal chaining with an Indian sample (arguably a more collectivist/interdependent culture than America), hypothesizing that a recency effect should be found for causality and a primacy effect should be found for blame. Their results indicated that this pattern held for blame, but that proximity to the event did not impact attributions of cause. This finding is interesting in that the distal entity was held more blameworthy than its proximal counterpart. Kanekar and Miranda suggested that this finding was expected because of the sequential relationship (i.e., that if it wouldn't have been for the actions of the first entity, the second entity would not have acted, and the event would not have occurred). However, if all that was in play was the significance of the sequential nature of causes, then the second part of their hypothesis (i.e., a primacy effect for cause) should have been significant. It is possible that their findings relate less to the sequential nature of the causes and more to the cultural perspective of their participants. These findings are consistent with the notion that individuals within collectivist cultures place more emphasis on the interrelatedness of relationships, thereby examining all of the connections between the potential causes and then placing more importance on the first action (i.e., distal entity) in the chain leading to the event (Sanders et al., 1996). It could be argued then that individuals within individualist cultures will

place more emphasis on the specific individual who directly caused the event (i.e., proximal entity), thereby paying less attention to other potential causes (e.g., situational aspects, other entities) and then find the person or entity at the end of the chain responsible for the event. In other words, high interdependent individuals might be more attuned to understanding others' behavior in their context and therefore put more weight on the distal actor in the chain, whereas high independent individuals might simply see the most proximal actor as the cause of the negative outcome.

Chapter 5: Hypotheses and Research Outline

The Present Study

The goal of the present research is to examine one overarching question: how do individuals parse out of culpability between different actors within a causal chain and what factors may influence this process? This study examines the impact of choice, the foreseeability of one's actions, and whether the actor's actions were necessary or sufficient causes for the subsequent actions by a person lower in a chain.

Study Introduction

The importance of human action in determining causal attributions, responsibility, and blame has been shown again and again in research – when there is human action (especially when the actor has a choice and foreseeability of the outcome), that actor is deemed more causally responsible and blameworthy (e.g., Hilton et al., 2016). These past studies, however, have examined chains in which there were non-human events (e.g., a lightning strike or a landslide) and one human action (Hilton et al., 2010, 2016). In this and other research the comparison was primarily on comparing voluntary action and natural events as causes even when there was a causal chain of two deliberate actions (McClure et al., 2007). Few social psychological studies have tackled the realm of causal chains in which a sequence of multiple human actions bring about an outcome had not yet been explored at all.

The current study attempts to get at this issue by examining scenarios in which there are multiple human actions which occur in a sequential fashion. Just like other research on causal chaining (e.g., Hilton et al., 2010, 2016), our focus is on the causation of harm (accidents, injury, fire, violations of privacy). In our scenarios, the harm is

always brought about as a consequence of a low-level actor who was acting on behalf of this organization. The actions themselves are never directly the cause of harm, they do not hurt customers directly; however, this lower level actor (whom we call “lower agent”) makes a decision that is clearly inferior to the status quo, and which invites harm to the customers of the company. This harm-inducing action of the lower agent is constant across all scenarios. In this sense, the immediate cause of harm is always human action. However, this lower agent’s actions are themselves influenced by the actions of two people above him in the organization’s managerial hierarchy. These two managers were either able to foresee the consequences of their own decision or not, and they did or did not have a choice in their decisions, that can be seen as contributing to a negative outcome. This allows for the examination of the impact of other human actors in the causal chain. Other than in the work by Hilton, McClure, and Moir (2016), our scenarios did not engage in any comparisons between voluntary or intentional and non-intentional or natural causes, simply because all possible causes were intentional. Yet, consistent with earlier research, we anticipated that when a manager has high foreseeability of the outcome and when he has a choice, he will be seen as more causality responsible and blameworthy than actors for whom this is not the case. Similar, it was expected that the more proximal cause will be seen as more causality responsible and blameworthy.

This study also examines the relationship of necessary and sufficient causes on attributions. Past studies have examined primarily opportunity chains in which the both parts of the chain were necessary for the outcome to occur and each was only jointly sufficient (i.e., each act on its own could not have resulted in the outcome, both acts needed to occur; McClure et al., 2007). The current study aims to make the distinction

between these concepts clearer and examine how varying combinations of necessity and sufficiency conditions impact attributions. Necessity and sufficiency are examined in terms of causing and enabling, where ‘causing’ is sufficient and ‘enabling’ is necessary. When the actor makes a decision that is sufficient to bring about a particular (undesirable) outcome, it is anticipated that he will be seen as more responsible than when he makes a decision that is seen as necessary for bringing about the same outcome. It is not known, however, how the sufficiency/necessity decision of the other actor will impact overall ratings of causality, responsibility, and blame for each actor within the chain.

The causal chains in the current study were developed to examine complex chains in which there were three protagonists, as mentioned before, a person closest to the ground, who was instrumental in bringing about the harm (called “lower agent”), as well as two managers. There is an upper-level or top-level manager (called “top manager”) whose decision always initiates the causal chain; this is the actor most distal actor from the wrongdoing. Next, there is a mid-level manager (called “middle manager”) whose own actions and decisions are influenced by the actions of the upper manager, with his own (the mid-level manager’s) actions in turn influencing the actions of the actor. In our scenarios, the harm-causing actions of the “lower agent” (person bringing about the harm) remain constant. Rather, manipulations of experimental variables only occurred for the upper-level and mid-level managers, thereby making the focus of this study on the impact of the actions and knowledge of these managers on attributions toward both the managers and the person who actually did the wrongdoing.

Hypotheses/Research Questions¹

Hilton and colleagues (2016) have found that when the actor has a choice and foreseeability of the outcome, that actor is deemed more causally responsible and blameworthy. We expect these findings to remain, even in the presence of multiple actors within the causal chain.

Hypothesis 1: When there is human action and the actor is able to foresee the consequences of his own actions, that actor is deemed more responsible, blameworthy, and liable compared to when there is no foreseeability of the outcome.

Hypothesis 2: When the actor has a choice in making a decision that leads to an undesirable outcome, he is held more responsible, blameworthy, and liable compared to when he does not have any alternatives.

Based on the research of McClure and colleagues (2007), it is expected that when an actor makes a decision that is sufficient to bring about a particular outcome, he will be held more responsible than when he makes a decision that is merely necessary for bringing about the same outcome.

Hypothesis 3: When the actor makes a decision that is sufficient in bringing about a particular (undesirable) outcome he is seen as more responsible and blameworthy for the outcome than when he makes a decision that is seen as necessary for bringing about the same outcome.

In general, those closest to a wrongdoing tend to be blamed, whereas the further away from the wrongdoing one gets the blame is less consistent and depends on several factors (Kanekar & Miranda, 1998).

Hypothesis 4: The more proximal cause in a causal chain will be seen as more causally responsible, blameworthy, and liable compared to the more distal cause.

¹ Because all of the actors in the scenarios in this study are male, we refer to male actors in the hypotheses.

In the present study, this means that the lower agent should generally be held more culpable than the top and middle managers.

Individuals who are attributionally complex are more likely to consider a broader range of causal factors, are less likely to be swayed by superficial characteristics of the evidence and its presentation, and thus less susceptible to bias (Fletcher, Rosanowski, Rhodes, & Lange, 1992; Lassiter et al., 2005; Pope & Meyer, 1999).

Hypothesis 5: Individuals high in AC are more likely than those low in AC to take the specific contextual forces into consideration when making attributions concerning responsibility and blame.

The work of Kanekar and Miranda (1998) and Sanders and colleagues (1996) suggests that high interdependent individuals should be more attuned to understanding others' behavior in their context and therefore put more weight on the more distal actors in the chain, whereas high independent individuals should simply see the most proximal actor as the cause of the negative outcome.

Hypothesis 6: High interdependent individuals will assign responsibility, blame, and liability to the distal and proximal actor in the causal chain, whereas high independent individuals will assign responsibility, blame, and liability primarily to the proximal actor.

There were several relationships we wanted to examine, but there was not enough existing research to allow us to make a hypothesis about the relationship between the variables. In these situations, we provide research questions.

Prior research has examined the impact of necessary or sufficient actions taken by a person on attributions toward that same person, but they have not explored the relationships between the actions of an individual within a causal chain and the impact those actions may have on a different person within the chain.

Research Question 1: How does the necessity/sufficiency decision of each actor impact overall ratings of responsibility, blame, and liability for the other actors within the chain?

Similar to Research Question 1, prior studies (e.g., Hilton et al., 2016; McClure et al., 2003) have examined these concepts separately, but they have not investigated the relationships between all of these variables.

Research Question 2: How does the combination of necessity, sufficiency, foreseeability, and choice impact attributions of responsibility, blame, and liability?

Although there are no clear hypotheses for these individual difference variables, we can make some predictions. Conservatives tend to be more pro-business. Therefore, when compared to liberals, conservative may be more inclined to attribute blame and responsibility to individual actors rather than businesses (or the people most closely associated with the business – e.g., CEO). Similarly, individuals who like small/big businesses more should hold them less culpable than those who like them less.

As for Litigation Crisis Attitudes, it is possible that litigation attitudes shape people's willingness to engage in the kind of potentially complex thinking that is required when parsing the individual contributions to actors in a causal chain. If this is the case, then we might also observe that people are skeptical of litigation-type reasoning and unwilling to engage in it. This could mean that those with negative attitudes toward litigation might prefer a simpler "solution" when deciding complex cases. When individuals think there is a clear guilty party that one can point to, there is no reason for litigation—especially if litigation is primarily a way for lawyers to extract large sums of money from people who tried their best, but have been occasionally imperfect.

Research Question 3: How do individual difference measures (i.e., civil juror litigation crisis attitudes, political ideology, feelings toward small and big businesses) related to decision making impact attributions of responsibility, blame, and liability?

Chapter 6: Method

Participants

We recruited 608 from Amazon's Mechanical Turk (MTurk), 51 of whom did not provide complete data (approximately 8%). Of those with complete data, 29 (5%) participants did not pass the manipulation check (see Results). Overall, we lost approximately 13% of our participants to missing/questionable data, resulting in 528 participants in our analysis sample. This sample included 294 (55.7%) males and 233 (44.1%) females (1 person indicated they were non-binary, 0.2%). The majority of the sample were Caucasian (376, 71.2%), followed by Asian (55, 10.4%), Black/African American (43, 8.1%), Hispanic/Latino (42, 8.0%), American Indian/Alaskan Native (6, 1.1%), other (4, 0.8%), and Native Hawaiian/Pacific Islander (2, 0.4%). The majority of the sample were never married (298, 56.4%), followed by married (172, 32.6%), divorced (43, 8.1%), separated (8, 1.5%), and widowed (6, 1.1%). The largest proportion of participants were between the ages of 25-34 (235, 44.5%), followed by 35-44 (130, 24.5%), 45-54 (63, 11.9%), 18-24 (59, 11.2%), and older than 55 (41, 7.77%). The largest proportion of participants had a 4 year degree (187, 35.4%), followed by some college (146, 27.7%), high school graduates/2 year degree (tied, each had 73, 13.8%), professional degree (45, 8.5%), and doctorate (4, 0.8%). Lastly, the largest proportion of participants identified as Democrat (233, 44.1%), followed by Independent (133, 25.2%), Republican (109, 20.6%), none (33, 6.3%), other (14, 2.7%), and Green Party supporter (6, 1.1%).

Procedure

The study uses a 2 (Top Manager: High vs. low foreseeability) x 2 (Middle Manager: High vs. low foreseeability) x 2 (Top Manager: Choice in decision vs. no

choice) x 2 (Middle Manager: Choice in decision vs. no choice) x 2 (Top Manager is necessary vs. sufficient cause) x 2 (Middle Manager is necessary vs. sufficient cause) design. The design is a mixed within- and between-subjects factorial design. Choice was manipulated between subjects, while Upper Manager Sufficiency/Necessity, Middle Manager Sufficiency/Necessity, Upper Manager Foreseeability and Middle Manager Foreseeability were manipulated within subjects across four different scenarios. There were a total of 16 different combinations of the latter four experimental factors. Each participant saw each scenario only once, allowing the implementation of a the repeated-measures/between participant factors. That is, though each participant saw all four scenarios, each was presented with a different constellation of the experimental factors outlined above. Specifically, every participant saw a subset of four combinations such that each participant received all four different combinations of Upper Manager Sufficiency/Necessity and Middle Manager Sufficiency/Necessity, as well as all four combinations of Upper Manager Foreseeability and Middle Manager Foreseeability. Using a Latin square approach, we ensured that, across all participants in the study, each of the four possible combinations of Manager Sufficiency/Necessity was presented roughly equally often with all four possible combinations of Manager Foreseeability.² Moreover, a second Latin square ensures that each possible combinations of the experimental factors appeared roughly equally often across each of four scenarios that participants saw (see below). Though this somewhat complex design ended up with 64

² Note that this Latin square represents technically another between-subjects variation, with sets of combinations of Upper/Middle Manager Sufficiency/Necessity being recombined with sets of combinations of Upper/Middle Manager Foreseeability.

different combinations of the experimental factors, it avoided any confounds that would undermine the validity of the present results.

To allow for replication and enable each participant to respond to four different combinations of the experimental factors, the study used four different scenarios (“stories”) that all follow the same basic study design. The four different scenarios are (1) a faulty product that injures several children; (2) a fire in a factory that injures several employees and leaves three dead; (3) food contaminated with E. coli that results in thousands of people getting sick; and (4) a cyber security hack that results in the leak of customers’ information and credit card numbers. In each scenario, a top-level manager in the organization’s hierarchy (i.e., CEO, CFO, or business owner) makes a decision about which he either did or did not have a choice in the option he selected (Choice), he did or did not foresee the consequences of his decisions for the actor below him (Foreseeability), and his decision either forces or enables the actions of the actor below him (Sufficiency/Necessity). This decision on the part of the top-level manager then leads a mid-level manager to make a decision in which he also either did or did not have a choice in the option he selected (Choice), did or did not have foreseeability of the potential negative outcome of the decision (Foreseeability), and his decision either forces or enables the last person in the causal chain who actually brings about the wrongdoing (Sufficiency/Necessity). The end result is always a negative outcome that impacts many of the organization’s customers or employees (see Appendix A for examples).

Participants first completed the Attributional Complexity and independence/-interdependence scales and then read a version of each of the four different scenarios. Each scenario had a different combination of the necessity/sufficiency and foreseeability

variables, but the same combination of the choice variables (choice varies between subjects, while all other variables vary within subjects). Across all participants, each scenario appeared equally often in all of the 64 conditions. After reading each scenario, participants were asked to (1) “Please indicate how *responsible* each of the parties are for the outcome.” (2) “Please indicate how *blameworthy* each of the parties are for the outcome.” and (3) “Please indicate how *liable* each of the parties are for the outcome.” The responses will be on a 7-point scale from (1) “Not at all” to (7) “Completely.” Participants then completed the Civil Jurors’ Litigation Crisis Attitudes scale, answered several questions about their attitudes towards businesses, and provided basic demographic information (e.g., sex and age). See Appendix B for the materials used.

The four scenarios were shown to the participants in random order. For example, one participant may have read scenario 2 first, followed by scenarios 4, 1, and 3, whereas another participant may have read the scenarios in the following order: 4, 1, 2, 3. Although we were not able to record the specific order in which each participant read the scenarios, we made the ordering random to control for any potential order effects. Also, we did not explore scenario effects in the current study. Whereas it is possible that scenarios may vary somewhat in the response they elicited by participants, their construction was highly parallel. Hence, focus was on analysis of theoretically-motivated manipulations rather than post-hoc interpretation of possible scenario differences.

Measures

Participants marked responses on a 1 to 7 scale with 1 ‘strongly disagree,’ and 7 ‘strongly agree.’ Higher values indicated greater belief in/agreement with the specified area.

Attributional Complexity Scale (AC). This 28-item measure taps individual differences in the preference for complex over simple explanations of behavior (Fletcher et al., 1986). Sample items include “I believe it is important to analyze and understand our own thinking processes” and “Once I have figured out a single cause for a person's behavior I don't usually go any further” (reverse coded). Scores for each item are totaled, resulting in one overall score of attributional complexity for each participant ($\alpha = .95$).

Independence/Interdependence (Self-Construal Scale). The Self-Construal Scale consists of 24 items used to measure two dimensions of self-image (independent and interdependent; Singelis, 1994). Twelve items on the scale pertain to independent self-construals and the other 12 pertain to interdependent self-construals. These items are used to examine thoughts, feelings, and actions related to how a person views him/herself in relation to others (interdependent) and as an independent person apart from others (independent). Individuals have both interdependent and independent self-construals (Singelis, 1994). The appropriate responses are recoded so that higher numbers indicate greater identification with independent or interdependent self-construals. The items in each of these two subscales are then combined to create two scales, one for level of independence ($\alpha = .76$) and one for level of interdependence ($\alpha = .82$). The correlation between the two scales was -0.11. Sample items include “My happiness depends on the happiness of those around me” and “I prefer to be direct and forthright when dealing with people I've just met”.

Civil Jurors' Litigation Crisis Attitudes (CJLCA). This scale consists of seven items used to determine participant's attitudes toward tort reform (Hans & Lofquist, 1994). More specifically, the scale examines general concerns related to the amount of

civil litigation and criticisms of civil juries. Sample items include “There are far too many frivolous lawsuits today” and “Most people who sue others in court have legitimate grievances” (reverse coded). Responses are recoded so that higher numbers indicate greater belief in a litigation crisis. The seven items will then be combined to form a litigation crisis scale ($\alpha = .86$).

Political ideology. A single question asked participants to indicate “Where you would find yourself on a spectrum of political ideology?” on a 1 to 7 scale with 1 ‘very liberal,’ 4 ‘middle of the road,’ and 7 ‘very conservative.’ This one-item assessment is by far the most common means of assessing political ideology (Jost, 2006).

Feelings towards small businesses. A single question asked participants to indicate “How do you feel about small businesses?” on a 1 to 7 scale with 1 ‘I really do not like small businesses,’ 4 ‘neutral,’ and 7 ‘I really like small businesses.’

Feelings towards large corporations. A single question asked participants to indicate “How do you feel about large corporations?” on a 1 to 7 scale with 1 ‘I really do not like large corporations,’ 4 ‘neutral,’ and 7 ‘I really like large corporations.’

Pro-/Anti-Business. A single question asked participants to indicate “Would you consider yourself more pro- or anti-business?” on a 1 to 7 scale with 1 ‘Anti-business,’ 4 ‘neutral,’ and 7 ‘Pro-business.’

Pro-/Anti-Free Market. A single question asked participants to indicate “Would you consider yourself more pro- or anti-free market?” on a 1 to 7 scale with 1 ‘Anti-free market,’ 4 ‘neutral,’ and 7 ‘Pro-free market.’

Chapter 7: Results

Standard for inferential analyses

There has been recent controversy concerning the replicability of social-psychological findings (e.g., Earp & Trafimow, 2015). There is a problem of false-positive findings, which were arguably reported too frequently (e.g. Simmons, Nelson & Simonsohn, 2011). Overall, in the present context we wished to guard against spurious results in a context in which statistical power is very high due to the use of efficient repeated-measure manipulation and comparatively large sample. Moreover, because research has not yet explored attribution in the context of causal chains of multiple human actions, we took a conservative stance with regard to the identification of new effects. Hence, we adopted a significance level of $\alpha = .01$, rather than the standard $\alpha = .05$. Note that we were not quite as strict as the alpha of .005 recently recommended by Benjamin and colleagues (2017) for novel effects with relatively low prior odds. In keeping with the notion that findings that do not meet our significance criterion may sometimes be worth noting, we treat findings greater than $p = .01$, but below $p = .015$ as marginally significant.

The statistical significance criterion used also has implications for how our figures are displayed. Rather than using error bars with one standard error (as is typically done), we display error bars that extend by 1.29 standard errors below and above the mean. The reasoning behind this is that a 95% confidence interval (corresponding to an $\alpha = .05$ significance level) is defined by 1.96 standard errors above and below the mean. When standard error bars of 1 standard error in length are used, non-overlapping error bars indicate (roughly) that two means can be considered significantly different from one

another. This makes it easy for a reader to look at means in figures and graphs, and identify those mean differences, which are most likely to be statistically significant.

To allow the reader to make similar inferences with the current significance criterion ($\alpha = .01$), we considered that a 99% confidence interval is defined by 2.58 standard errors above and below the mean. Hence, for our purposes, we chose to display error bars of 1.29 standard errors in length.

Attention checks

There were two attention checks included in the current study. First, we used an instructional attention check created by Oppenheimer and colleagues (2009), called the blue dot task. This question mimics the structure of a Likert scale question but instructs the participant to not click a response on the scale, but rather to click on a little blue circle at the bottom of the screen. The full instructions read: “Please click on the little blue circle at the bottom of the screen. Do not click on the scale item below that is labeled from very rarely to very frequently.” Individuals who did click on the scale items were assumed to have not read the instructions; since they likely did not fully read other key parts of the study, they were excluded from the analysis sample. Second, we included a question in the middle of a series of questions used to comprise a scale, in which we instructed the participants to select a specific answer. The question stated: “This is to screen out random clicking – please mark ‘Strongly disagree’”. This was included to ensure that participants were reading each question within the scale and not randomly clicking answers.

Of the 557 participants with complete data, 29 were removed for failing one or both attention checks. One failed both, eight failed the blue dot task, and 20 failed

following instructions to mark a specific answer on a question. This resulted in the analysis sample consisting of 528 U.S. participants.

Preliminary Analyses

Responsibility, blame, and liability ratings were highly correlated (all $r_s \geq .64$ – it was $\geq .70$ for upper and $\geq .74$ for lower agent) and yielded largely redundant effects. When examining the correlations for these three dependent variables, a clear pattern emerged regardless of Actor. The highest correlation was always between responsibility and blame (lowest $r = .84$). This was followed by the correlation between blame and liability (lowest $r = .69$) and finally the correlation between responsibility and liability (lowest $r = .64$). Although these are still three distinct concepts that can all have varying outcomes based on the scenario, in the current study these differences were not large enough to warrant the examination of each dependent variable separately. Therefore, these variables were combined into one dependent variable which will be referred to as “culpability” (see Appendix C for the correlations).

Principal Component Analyses and Confirmatory Factor Analyses were conducted to examine the relationship between our four business-related variables (feelings towards large corporations, feelings towards small businesses, pro/anti-business, pro/anti-free market). Results indicated that only three of these variables, excluding feelings toward small businesses, formed an internally consistent scale (Cronbach’s $\alpha = .77$), and additional analyses confirmed that this scale was also unidimensional, $\omega = .78$ (Zinbarg et al., 2005). The three variables were thus combined into one variable that will be referred to as “feelings towards Big Businesses.” See Table 2 for correlations, means and standard deviations for all the individual difference variables.

Table 2. Correlations, means, and standard deviations for individual difference variables

	(1) ACS	(2) CJLCA	(3) Inter- dependence	(4) In- dependence	(5) Political Ideology	(6) Small Business	(7) Big Business
(1)		-0.14	0.12	0.19	-0.18	0.09	-0.13
(2)			0.13	0.02	0.39	0.23	0.24
(3)				-0.11	0.08	0.22	0.16
(4)					0.08	0.25	0.19
(5)						0.27	0.50
(6)							0.37
<i>M</i>	4.69	4.18	4.60	5.17	3.42	5.55	4.33
<i>(SD)</i>	(0.96)	(1.09)	(0.91)	(0.81)	(1.73)	(1.04)	(1.25)
α	0.95	0.86	0.82	0.76	N/A	N/A	0.77

**Note.* Correlation coefficients equal to or greater than .08 were significant at $p < .01$.

Basic Model

Initially, we examined the effects of the experimental manipulations on the dependent variable without consideration of any individual-difference moderators. This resulted in the 2 (Top Manager Sufficiency/Necessity) x 2 (Top Manager Choice/No Choice) x 2 (Top Manager Foreseeability/No Foreseeability) x 2 (Middle Manager Sufficiency/Necessity) x 2 (Middle Manager Choice/No Choice) x 2 (Middle Manager Foreseeability/No Foreseeability) x 3 (Top/Middle/Lower Actor Culpability) factorial mixed-effects model outlined earlier. Specifically, we ran a multilevel model, which recognized that some of the experimental factors varied within participants, whereas others varied between participants. Specifically, Choice was manipulated between participants and the other factors (i.e., Sufficiency/Necessity and Foreseeability/No Foreseeability) were manipulated within and between participants (see Method section). At the same time, each participant provided response pertaining to each of the four

scenarios. Hence, we treated responses to each of the four scenarios as nested within participants.

This analysis yielded, first, a main effect for Actor, $\chi^2(2) = 26.61, p < .0001$, showing that the lower agent (i.e., the most proximal actor, $M = 5.48$) was held significantly more culpable than the upper ($M = 5.35, p = .0068$) and lower ($M = 5.25, p < .0001$) agents (see Figure 2). This finding somewhat supports Hypothesis 4, that a proximal agent will be held more culpable than a distal agent.

This main effect was further qualified by Middle Manager Sufficiency/Necessity, $\chi^2(2) = 9.46, p = .0088$ (see Figure 3). The same overall pattern of the lower agent being most culpable, followed by the top manager and then the middle manager, was found regardless of whether the middle manager's actions were sufficient or necessary. Although the sequence of means was consistent, the differences were not always significant. Only in the condition when the middle manager's actions were necessary was the lower agent ($M = 5.52$) held significantly more culpable than the middle manager ($M = 5.23$), $p < .0001$. This finding was consistent with theory: Actions that enable those lower in the chain to make a decision (but which do not require them to do so) should lead to more culpability being placed on the person at the end of the chain, as their agency is not constrained. In short, people are blamed more for actions that they were not required to take.

However, the primary prediction that Middle Manager Sufficiency/Necessity should create different perceptions of the middle manager's culpability did not materialize. The middle manager was held slightly more culpable when his actions were sufficient in that they preordained the decision of the lower agent ($M = 5.27$) compared to

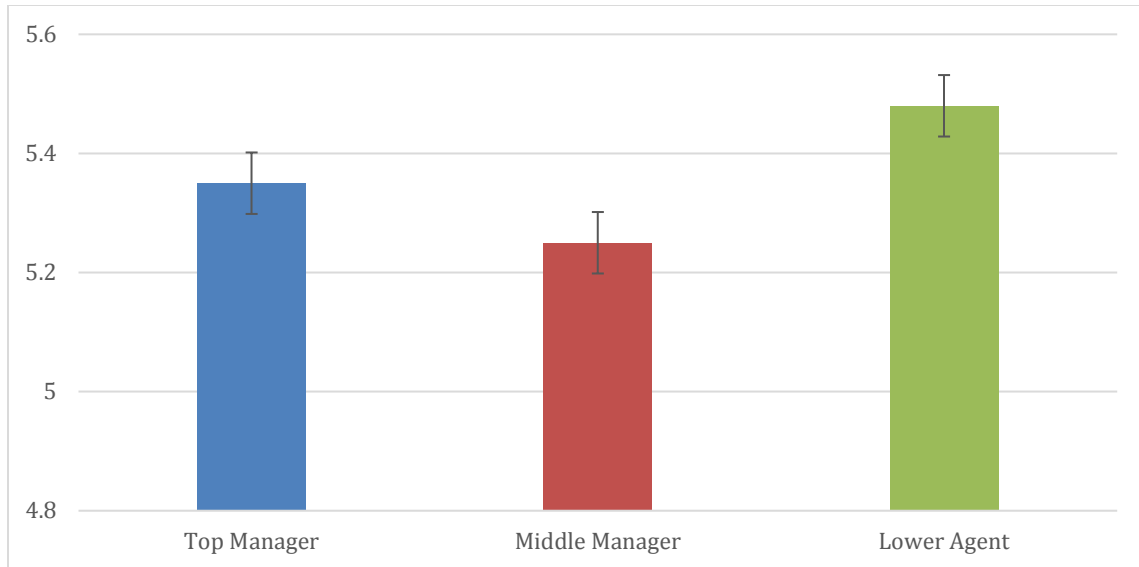


Figure 2. Actor main effect.

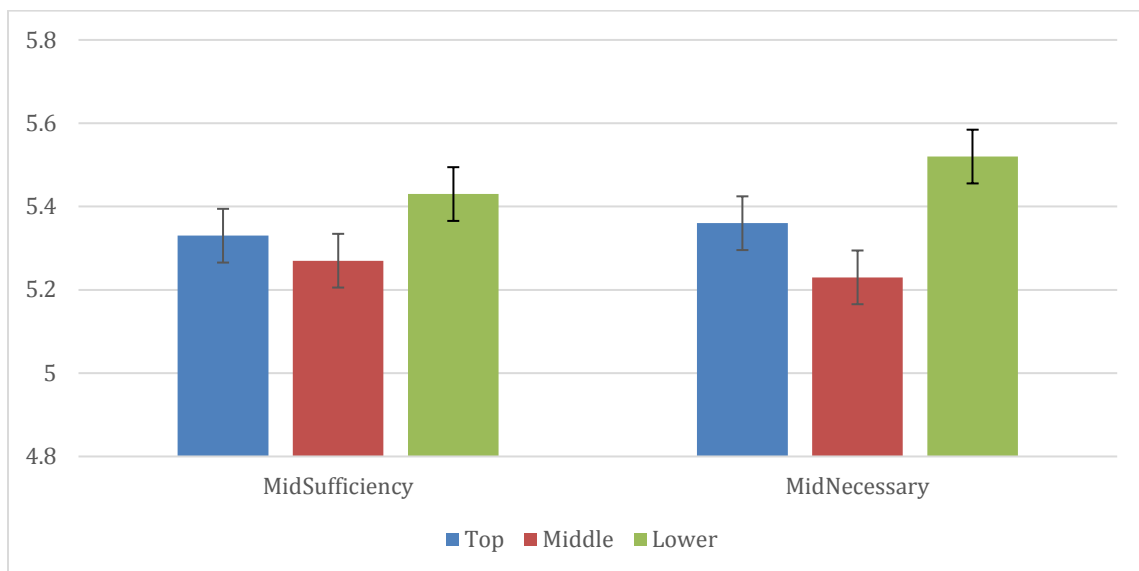


Figure 3. Actor by Middle Manager Sufficiency/Necessity 2-way interaction.

when they were only necessary for the lower agent's decision ($M = 5.23$), but these differences were not significant ($p = .58$). When the actions of the middle manager were sufficient to bring about the lower agent's subsequent actions, any differences between

the lower agent, the middle manager, and the top manager were no longer statistically significant in terms of the criterion adopted in this study ($p > .016$). Only when the middle manager's actions were necessary, but not sufficient, was the middle manager judged to be less culpable than the lower agent, $p < .0001$, though no other differences among actors emerged, both $ps > .022$.

The Actor main effect was also qualified by Middle Manager Choice, $\chi^2(2) = 20.81, p < .0001$ (see Figure 4). When the middle manager had a choice, he was held more culpable ($M = 5.44$) compared to when he had no choice ($M = 5.06$), $p < .0001$. This is consistent with previous findings showing that choices leading to an unfavorable outcome increase the perceived responsibility of an actor (e.g. Hilton et al., 2016). Also, when the middle manager did not have a choice, he was held less culpable ($M = 5.05$) than the top manager ($M = 5.38, p < .0001$) and the lower agent ($M = 5.40, p < .0001$). However, when the middle manager did have a choice, the middle manager himself did not differ from the other two actors, even though the lower agent ($M = 5.56$) was held

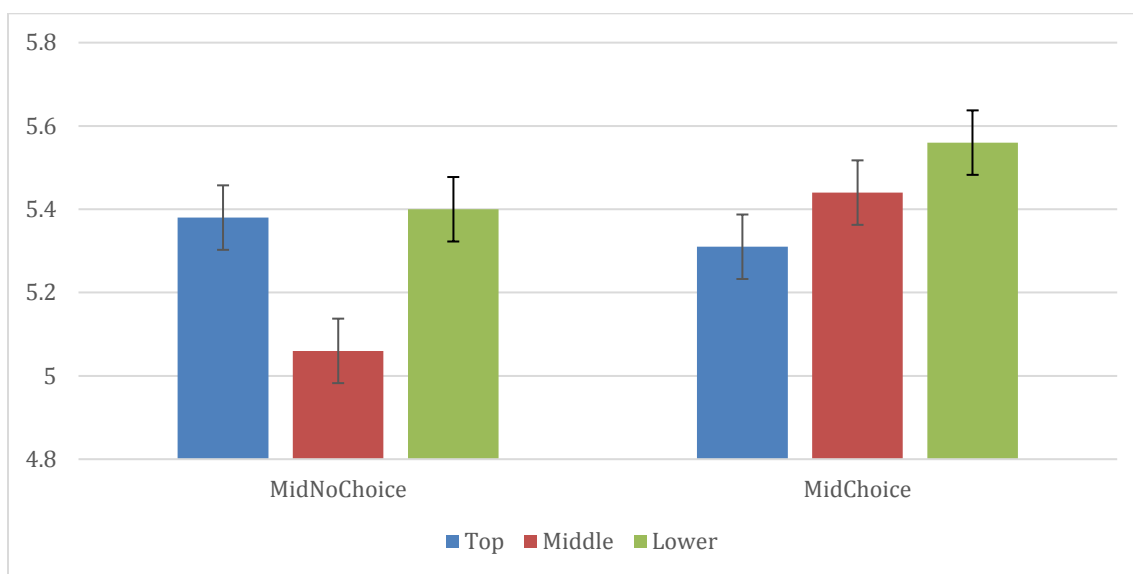


Figure 4. Actor by Middle Manager Choice 2-way interaction.

more culpable than the top manager ($M = 5.31$), $p = .0002$. Put differently, a middle manager with choice was considered equally culpable as all other members of the chain.

Both the Actor by Middle Manager Sufficiency/Necessity interaction, and the Actor by Middle Manager Choice interaction were further qualified by a three-way interaction involving all of these variables, $\chi^2(2) = 12.33$, $p = .0021$. Figure 5 illustrates that the middle manager was least blamed when he did not have a choice, regardless of whether his actions were sufficient or necessary. However, Middle Manager Sufficiency/Necessity had important implications for the culpability assigned to the lower agent. Only when the middle manager had no choice, and when his actions were a necessary, but not a sufficient precondition for the lower agent's action, was greater culpability assigned to the lower agent. In other words, when the middle manager did not have a choice, yet his actions predetermined those of the lower agent, this had an exculpatory effect on the latter.

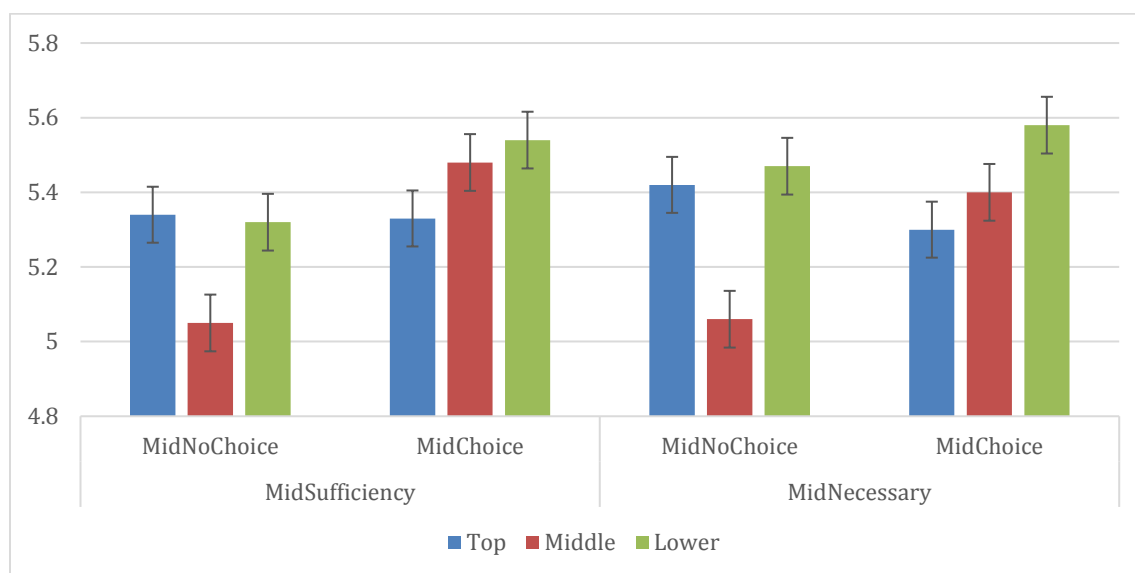


Figure 5. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice 3-way interaction.

Focusing on the middle manager, when the middle manager had a choice ($M_{\text{Suf}} = 5.48$; $M_{\text{Nec}} = 5.40$), he was held more culpable compared to when he did not have a choice ($M_{\text{Suf}} = 5.05$, $p = .0001$; $M_{\text{Nec}} = 5.06$, $p = .0018$). Also, when the middle manager did not have a choice, he still was held less culpable ($M_{\text{Suf}} = 5.05$; $M_{\text{Nec}} = 5.06$) than the upper manager ($M_{\text{Suf}} = 5.34$, $p = .0024$; $M_{\text{Nec}} = 5.42$, $p = .0001$) and the lower agent ($M_{\text{Suf}} = 5.32$, $p = .0047$; $M_{\text{Nec}} = 5.47$, $p < .0001$). Therefore, not having a choice made the difference between the middle manager and the two other actors (i.e. the top manager and the lower agent) more pronounced. When the middle manager did have a choice, his culpability did not deviate significantly from the upper or lower agent agent's culpability based on the other factors (all $ps > .10$). However, we did find an impact of middle manager choice on the relationship between the lower agent and top managers. Middle manager necessity coupled with the middle manager having a choice resulted in the lower agent ($M = 5.58$) being more culpable than the top manager ($M = 5.30$, $p = .0041$), with the middle manager culpability falling in-between these two ($M = 5.40$) and being significantly lower than the lower agent's culpability, $p < .01$.

In other words, situations, in which the middle manager was considered clearly much less culpable than the top manager and the lower agent, occurred when the middle manager's actions were only a necessary precondition for the lower agent's actions, and when the middle manager did not have any choice. This provides at least partial support for the notion that not having a choice exculpates an actor, as does the fact that their actions did not predetermine the final outcome.

There was also a significant Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice three-way interaction, $\chi^2(2) = 9.47$, $p = .0088$. Unlike our findings

for the impact of Middle Manager Choice on middle manager culpability, the top manager's culpability was not directly impacted by whether or not he had a choice ($ps > .20$). The only scenario in which Top Manager Choice had an effect on top manager culpability was when the middle manager's actions were necessary and the top manager had no choice; then, the lower agent ($M = 5.54$) was held slightly more culpable than the top manager ($M = 5.29$), $p = .0129$. We also found that Top Manager Choice impacted the middle and lower agents, so it affected those further down the causal chain. Top manager choice, in combination with the middle manager's actions being necessary, resulted in the middle manager being held somewhat more culpable ($M = 5.37$), compared to when the top manager did not have a choice ($M = 5.09$), $p = .0108$. Therefore, we see that, when the middle manager's actions enabled (but did not require) actions by the lower agent, the top manager having a choice made the middle manager more culpable. Also, we found that, when the top manager did not have a choice, regardless of Middle Manager Sufficiency or Necessity, the lower agent ($M_{\text{Suf}} = 5.42$, $M_{\text{Nec}} = 5.54$) was held more culpable than the middle manager ($M_{\text{Suf}} = 5.16$, $M_{\text{Nec}} = 5.09$), with both differing from their corresponding mean at $p < .0095$. The pattern indicates that, when the top manager did not have a choice, the relationship is similar to that of the Actor Main Effect results. However, when the top manager did have a choice, those patterns change and there appeared to be more of an effect of Middle Manager Sufficiency/Necessity, although none of these latter differences reached statistical significance, $ps > .01$.

Finally, the Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice interaction was qualified by Middle Manager Foreseeability, $\chi^2(2) = 9.76$, $p =$

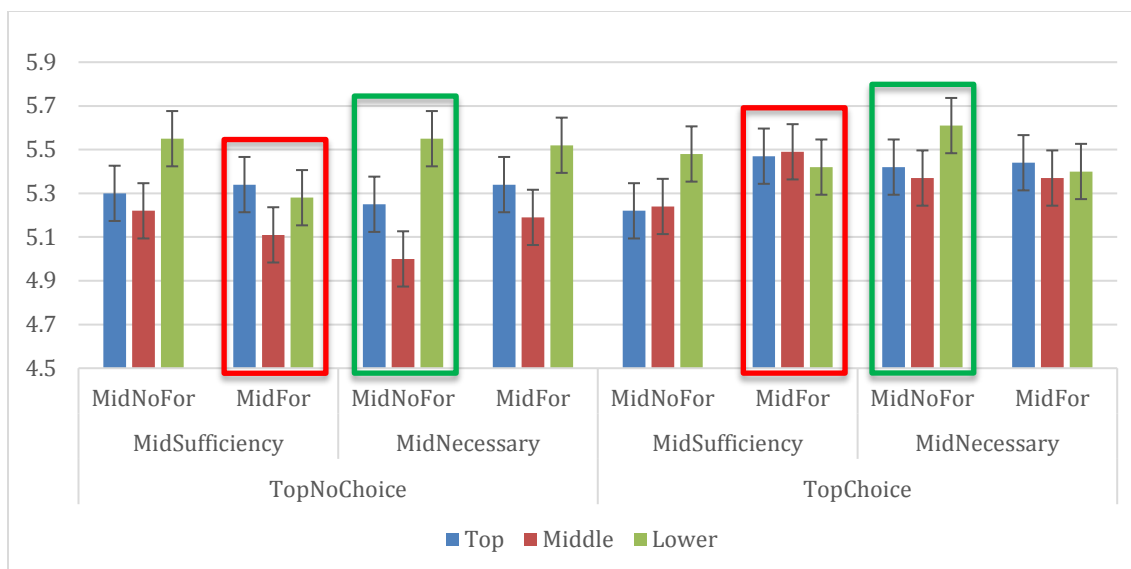


Figure 6. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice 4-way interaction.

.0076 (see Figure 6). When the Middle Manager's Foreseeability is included in the interaction, the top manager having a choice still results in the middle manager being held more culpable compared to when the top manager had no choice, but only in two situations. First, when the middle manager's actions were sufficient and the middle manager could foresee the consequences of his own actions, the middle manager was held more culpable when the top manager had a choice ($M = 5.49$) compared to when the top manager had no choice ($M = 5.11$), $p = .0059$ (see the red boxes in Figure 6). We would predict that this combination of middle manager variables (sufficient/foreseeable) would result in higher middle manager culpability, simply because the middle manager knowingly predetermined the actions of the lower agent, which would ultimately cause harm. Yet, this pattern runs counter to our predictions that top manager choice in this situation would increase the middle manager blame. We anticipated that the top manager

having a choice might have a lessening effect on the culpability placed on the middle manager, because the top manager should be perceived as more culpable when they have a choice. Yet, this was not supported in our results. At the same time, it is critical to acknowledge that our dependent measures did not require participants to allocate a set “amount” of culpability. Hence, one actor’s perceived culpability might increase or decrease independently from the perceived culpability of another actor.

Second, when the middle manager’s actions were necessary and he could not foresee the consequences of his actions, the middle manager was held more culpable when the top manager had a choice ($M = 5.37$) compared to when he had no choice ($M = 5.00$), $p = .0091$ (see the green boxes in Figure 6). With this combination of middle manager variables, necessary and not foreseeable, we would expect that the middle manager culpability should be lower than when the middle manager’s actions were sufficient and foreseeable. In the first situation, he did not anticipate what would happen and only enabled harmful behavior on the part of the lower agent; in the second situation he knew that his own actions would constrain the lower agent’s actions and likely bring about harmful consequences. We did observe this pattern in our data ($M = 5.49$ and 5.11 , respectively), although the difference was not statistically significant, all $ps > .01$.

Additionally, the earlier results for the Actor by Middle Manager Sufficiency/ Necessity by Top Manager Choice interaction (the finding that regardless of middle manager sufficiency or necessity, when the top manager did not have a choice, the lower agent was held more culpable than the middle manager) was further qualified. Only when the middle manager’s actions were necessary (i.e. did not predetermine the lower agent’s actions), the top manager did not have a choice, and the middle manager’s actions were

not foreseeable, the lower agent ($M = 5.55$) was held more culpable than the middle manager ($M = 5.00$), $p < .0001$. When the lower agent was unconstrained, that is, he was enabled by a middle manager who did not know what would happen and the entire chain was started by someone who had no choice, there was maximum culpability for the lower agent.

Summary. The present findings confirm basic assumptions concerning proximity and culpability. There was partial support for the notion that especially the middle manager is held less culpable when his own actions can be understood as being conditioned by the actor higher up in the hierarchy. However, this evidence is highly dependent on the context. With few exceptions, the lower agent (the actor closest to the wrongdoing) is the actor considered most culpable. This last finding is surprising in light of the fact that his actions might be overdetermined by those before him in the hierarchical decision-making chain.

CJLCA Moderates Experimental Effects

When we included the individual difference variable of Civil Juror Litigation Crisis Attitudes (CJLCA) in the model, we found the same significant interactions as we did with the basic model (Actor, $\chi^2(2) = 29.20$, $p < .0001$; Actor by Middle Manager Sufficiency/Necessity, $\chi^2(2) = 10.69$, $p = .0048$; Actor by Middle Manager Choice, $\chi^2(2) = 22.71$, $p < .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 12.83$, $p = .0016$; Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice, $\chi^2(2) = 10.55$, $p = .0051$; Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Foreseeability, $\chi^2(2) = 10.22$, $p = .0060$). However, there was also an additional five-way interaction involving

Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice by Top Manager Foreseeability by CJLCA, $\chi^2(2) = 9.60, p = .0082$. The findings for CJLCA (and all other moderator variables) will be summarized in terms of individuals high (at one standard deviation above the mean of the distribution) and low (at one standard deviation below the mean of the distribution) on each continuous individual difference variable. For all moderators, we will first discuss each interaction in terms of the differences that exist within each level of the individual difference variable (e.g., differences between experimental conditions amongst those high in CJLCA) and then discuss the differences that exist between the two levels of the variable (e.g., differences between those high and low in CJLCA).

We represent the very same data previously displayed for the differences within one level of an individual difference variable (i.e. above 1 *SD* or below 1 *SD* of the mean) in a different format for the comparison of differences between the two levels, such that difference between those high and low in the individual difference variable are more easily apparent. This representation of the data allows the effects of a continuous individual difference variable to emerge in the way in which it qualifies the culpability rating of a specific actor. Arguably, because the individual difference variable is continuous, this type of difference should be represented by a regression coefficient. However, here we continue to provide point estimates for those high (i.e. 1 *SD* above the mean) and low (i.e. 1 *SD* below the mean) on that individual difference variable.³ This

³ Although the language in the text may make it appear to the reader that we are conducting a difference of groups comparison, in actuality we are reporting mean estimates for individuals at one standard deviation above and below the mean. These estimates are generated from a regression function for the entire sample.

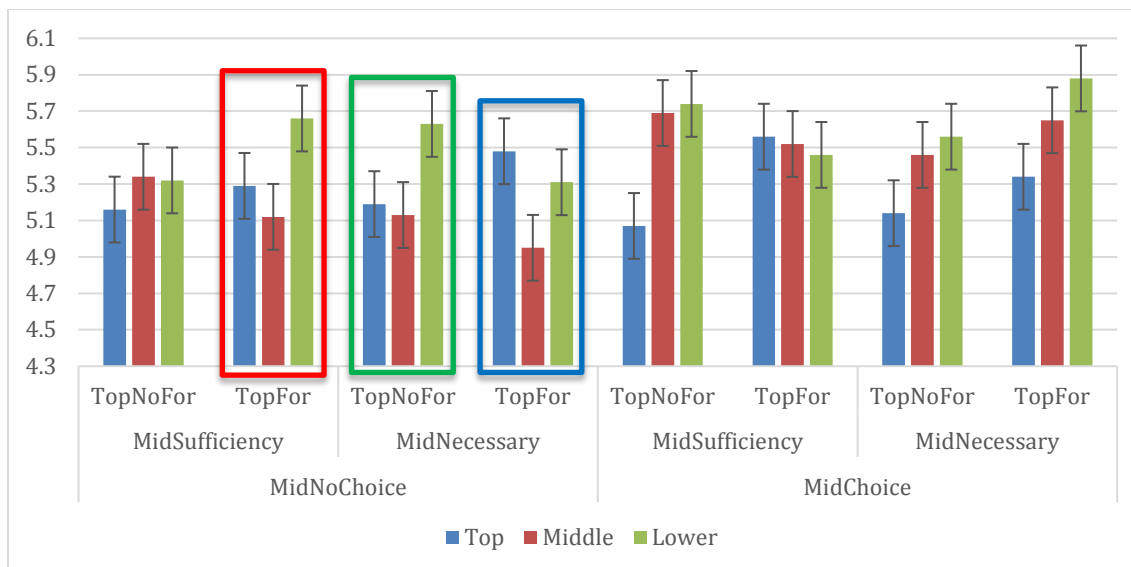


Figure 7a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by CJLCA 5-way interaction – high CJLCA participants.

keeps the representation of the differences consistent across different figures representing the same data and makes it easier for the reader to compare.

At high levels of CJLCA, when the middle manager had a choice, the middle manager was always considered more culpable compared to when he did not have a choice (in Figure 7a compare the four red bars on the right-hand side of the figure with their correspondent red bars on the left-hand side).⁴ However, this comparison was only statistically significant when the top manager did foresee the consequences of his actions ($M_{\text{MidSuf}/\text{MidChoice}} = 5.52$ vs. $M_{\text{MidSuf}/\text{MidNoChoice}} = 5.12$, $p = .0075$; $M_{\text{MidNec}/\text{MidChoice}} = 5.65$ vs.

⁴ Because of the complexity of the results, different aspects of the findings will be illustrated with different graphs of the same data. Graphs relating to the same interaction will have the same figure number but differ in terms of their numbering. First, we will display the data in a way that highlights the differences within a group (typically labeled a or a and b – depending on the complexity of the interaction), followed by graphs displaying the data in a way that highlights the differences between groups (typically labeled b or c and d – depending on the complexity of the interaction). Even though there are 2 (sometimes 4 graphs), the data in the graphs is the same (in situations where there are 4 graphs, the first two graphs are distinct and the second two are the same data as the first two, just in a different format).

$M_{\text{MidNec/MidNoChoice}} = 4.95, p = .0005$). Interestingly, high-CJLCA did not necessarily assign greater culpability to the middle manager compared to the lower agent when the middle manager did have a choice. Indeed, the only instances in which high-CJCLA individuals assigned a significantly lower level of culpability to the middle manager than the lower agent were when the middle manager's actions were sufficient, the top manager had foreseeability, and the middle manager had no choice ($M = 5.12$ vs. 5.66), $p = .0023$ (see the red box in Figure 7a) and when the middle manager's actions were necessary, the top manager had no foreseeability, and the middle manager had no choice ($M = 5.13$ vs. 5.63), $p = .0060$ (see the green box in Figure 7a). The condition where the middle manager's actions were necessary, he had no choice, and the top manager had foreseeability was the only instance in which the top manager was held more culpable than the middle manager ($M = 5.48$ vs. 4.95), $p = .0023$ (see the blue box in Figure 7a).

Whenever the middle manager did have choice, lower agent was considered more culpable than the top manager, all $ps < .01$, except when the middle manager had a choice, but the middle manager's actions were sufficient to trigger (i.e. they predetermined) the actions of the lower agent, and when top manager foresaw the consequences of his actions for the middle manager. Yet, when the middle manager did not have a choice, then the top manager was considered less culpable than the lower agent only when the middle manager's actions were sufficient for the lower agent, and when the top manager had no foreseeability. For the top manager, it appeared that him not having foreseeability and the middle manager having a choice were the key elements in reducing his culpability. Conversely, for the middle manager, him only enabling the actions of the lower agent and not having a choice, coupled with the top manager having

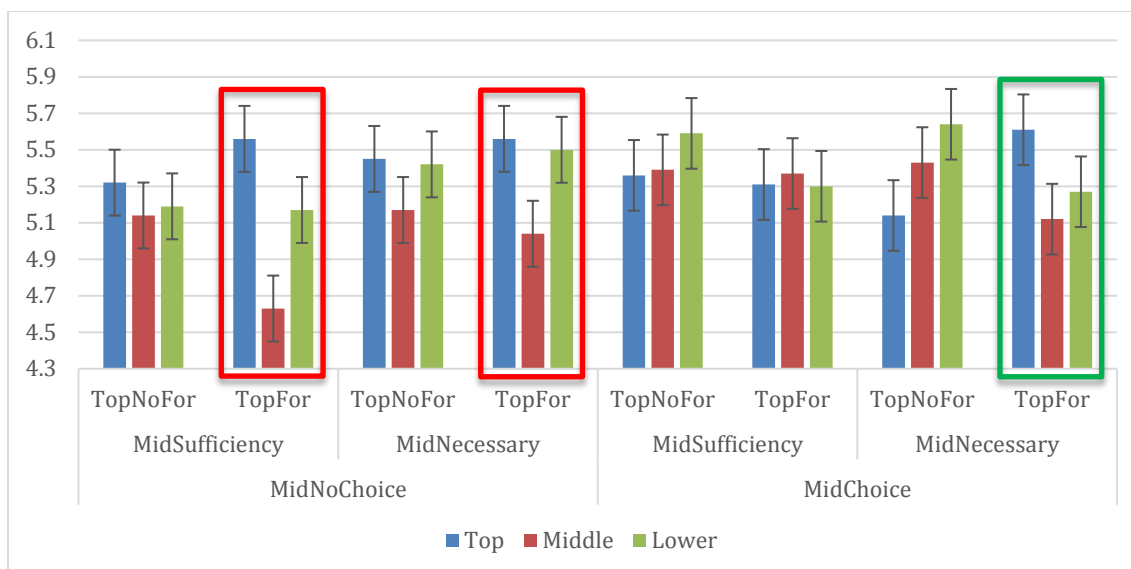


Figure 7b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by CJLCA 5-way interaction – low CJLCA participants.

foreseeability, reduced his culpability. The scenarios for both the top and middle managers receiving less culpability were what we would expect based on expectations of distributing culpability amongst the actors.

The situation resulting in the lower agent being considered more culpable is even more complex. The element of having the middle manager's actions only enable the lower agent's actions were consistent with increased lower agent culpability. Yet, the middle manager having a choice should have decreased lower agent culpability, but it did not. This indicated that individuals high in CJLCA may be putting more emphasis on the impact of the middle manager's sufficiency/necessity on the lower agent, and less emphasis on the middle manager's choice.

At low levels of CJLCA, visual inspection also confirmed that a middle manager with choice was considered more culpable than a middle manager without choice

(compare the red bars on the left side of Figure 7b with those on the right-hand side). However, this difference was only significant when the middle manager's actions were sufficient to bring about (i.e. predetermined) the actions of the lower agent, and when top manager knew how his own actions would affect the actions of the middle manager ($M = 4.63$ vs. 5.37), $p = .0003$. Among low-CJLCA individuals the middle manager was held significantly less culpable than the upper and lower agent agents in a variety of conditions (see Figure 7b). Specifically, the top manager and lower agent were held more culpable than the middle manager when the top manager had foreseeability and the middle manager had no choice (regardless of Middle Manager Sufficiency/Necessity; $M_{\text{TopSuf}} = 5.56$, $M_{\text{MidSuf}} = 4.63$, $M_{\text{LowSuf}} = 5.17$, $ps < .01$; $M_{\text{TopNec}} = 5.56$, $M_{\text{MidNec}} = 5.04$, $M_{\text{LowNec}} = 5.50$, $ps < .01$; see the red boxes in Figure 7b). The top manager was also more culpable than the middle manager when the middle manager's actions were necessary, the top manager had foreseeability, and the middle manager had a choice ($M = 5.61$ vs. 5.12), $p = .0004$ (see the green box in Figure 7b).

In contrast to their high-CJLCA counterparts, individuals low in CJLCA appeared to be much more inclined to consider the top manager culpable than the middle manager. In half of all eight experimental conditions summarized in Figure 7b low-CJLCA people considered the top manager more culpable than the middle manager, whereas this was the case for only a single condition of eight for high-CJLCA participants. This highlights a reluctance of high-CJLCA individuals to blame any parties who are distal to a harmful event, presumably because doing so would invite litigation. Conversely, if one primarily seeks fault with those parties who were immediately involved in a harm-causing event, then this limits the possibility of litigation.

A very different pattern for high- and low-CJLCA individuals also emerged for how they viewed the culpability of the lower agent. As noted above, high-CJLCA individuals tended to consider the lower agent at least as culpable as the top manager and the middle manager; in no case was the culpability of the lower agent to be considered significantly lower than either of these parties (see Figure 7a). However, among low-CJLCA the same pattern did not necessarily emerge. There was one situation in which the lower agent was significantly less culpable than the top manager, when the middle manager's actions were sufficient and he had no choice and the top manager had foreseeability ($M = 5.17$ vs. 5.56), $p = .0086$ (see the leftmost red box in Figure 7b).

The lower agent was considered more culpable than the middle manager when the middle manager did not have a choice and the top manager had foreseeability, regardless of Middle Manager Sufficiency/Necessity ($M_{\text{Suf}} = 5.17$ vs. 4.63 , $p = .0017$; $M_{\text{Nec}} = 5.50$ vs. 5.04 , $p = .0073$; see the red boxes in Figure 7b). The impact of the actor directly above them in the causal chain not having a choice and only enabling the lower agent's actions is what we would expect, and it appeared that for low-CJLCA individuals in these scenarios the foreseeability of the top manager takes a back seat to the actions of the middle manager. However, when the middle manager had a choice, in combination with the top manager not having foreseeability, the Middle Manager Sufficiency/Necessity was not as critical. In general, high-CJLCA individuals seemed more inclined to find the lower agent most culpable, while those low in CJLCA would find both the lower agent and the top manager most culpable. This is consistent with the idea that high-CJLCA individuals tend to be less litigious and would only want to blame those who directly engaged in the wrongdoing, in contrast to low-CJLCA individuals who would be more

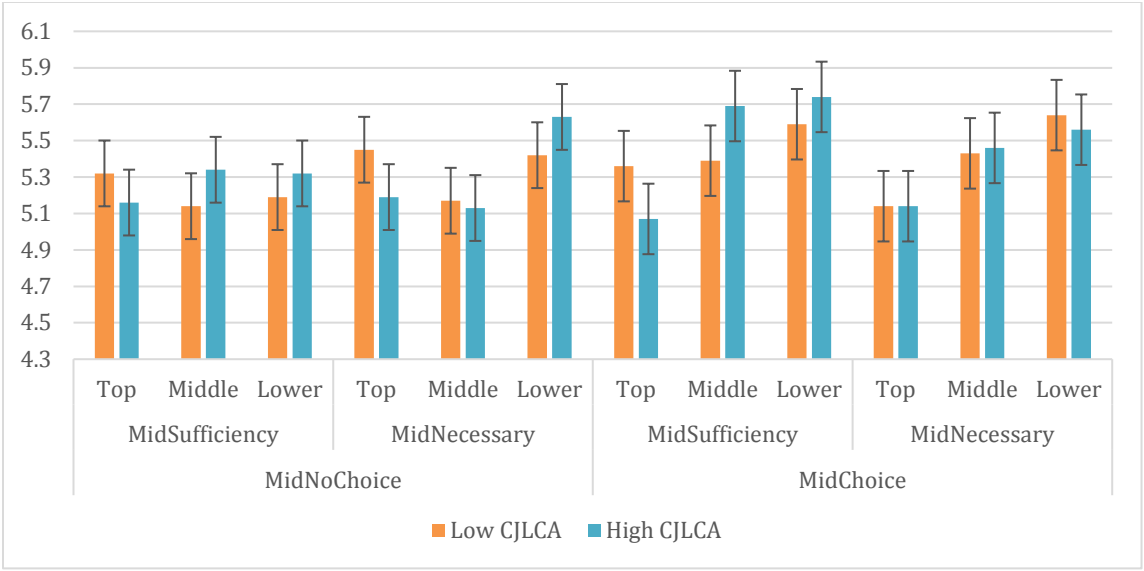


Figure 7c. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by CJLCA 5-way interaction – examining high and low CJLCA individuals in the conditions where the Top Manager did not have foreseeability.

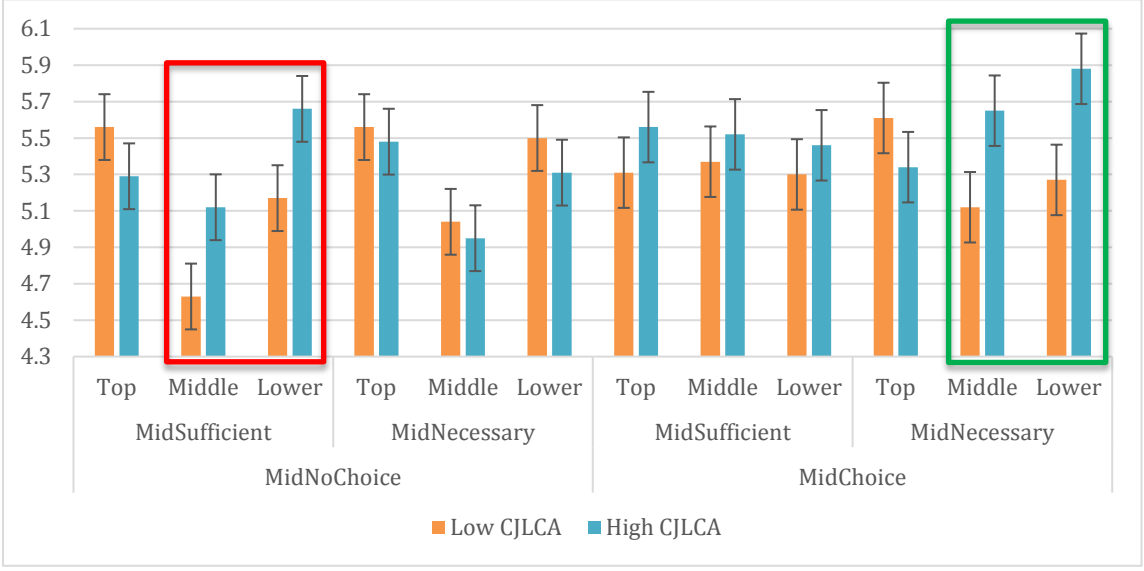


Figure 7d. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by CJLCA 5-way interaction – examining high and low CJLCA individuals in the conditions where the Top Manager did have foreseeability.

willing to find blame among several parties and be potentially open to increased

litigation.

There were no differences between high and low levels of CJLCA when the top manager did not have foreseeability (See Figure 7c). There were, however, differences when the top manager did have foreseeability about his actions (See Figure 7d). When the middle manager did not have a choice and his actions were sufficient (i.e. predetermined the lower agent's actions), high-CJLCA people found both the middle manager and lower agent more culpable than their low-CJLCA counterparts (see the red box in Figure 7d). The same pattern was found for when the middle manager had a choice and his actions were necessary (see the green box in Figure 7d).

Summary. Individuals high in CJLCA primarily tend to hold the lower agent culpable, whereas individuals low in CJLCA tend to hold the top and middle managers culpable as well. In general, individuals high in CJLCA may be putting more emphasis on the impact of the middle manager's sufficiency/necessity on the lower agent, and less emphasis on the middle manager's choice and top manager's foreseeability. In contrast to their high-CJLCA counterparts, individuals low in CJLCA appeared to be more inclined to care about middle manager choice and top manager foreseeability. Broadly speaking, people who believe that there is too much civil litigation going on (i.e. high-CJLCA individuals) appeared to be unwilling to engage in the kind of detailed parsing out of the contributions of different actors in a causal chain that may have produced the wrongdoing.

Interdependence Moderates Experimental Effects

As before, when we included the individual difference variable of interdependence in the model, we found the same significant interactions as we did with

the basic model (Actor, $\chi^2(2) = 28.74, p < .0001$; Actor by Middle Manager Sufficiency/Necessity, $\chi^2(2) = 10.86, p = .0044$; Actor by Middle Manager Choice, $\chi^2(2) = 22.60, p < .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 14.16, p = .0008$; Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice, $\chi^2(2) = 9.68, p = .0079$; Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Foreseeability, $\chi^2(2) = 9.81, p = .0074$). However, there was also an additional three-way interaction of Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice that was impacted by Interdependence, $\chi^2(2) = 9.66, p = .0080$ (see Figure 8a).

Diagnosing this interaction, we again focused on high and low levels of interdependence, defined by 1 *SD* above the mean, and 1 *SD* below the mean of the distribution. At high levels of interdependence, there were two conditions that resulted in significant differences in culpability (see the right side of Figure 8a). The middle manager was held significantly less culpable than the lower agent when the middle manager had no choice, regardless of Middle Manager Sufficiency/Necessity ($M_{\text{Suf}} = 5.09$ vs. $5.51, p = .0011$; $M_{\text{Nec}} = 5.22$ vs $5.52, p = .0094$; see the red boxes in Figure 8a). These findings show that the middle manager not having a choice was given more weight in the decision-making process than whether or not his actions forced (verses merely enabled) the lower agent to act. We would have expected that individuals high in Interdependence were more cognizant of the social hierarchy and situational pressures that impacted the actors and be more inclined to see all the actors as a part of the larger collective, thereby taking those actions into account in their decision-making processes. These predictions were somewhat reflected in the data in that in general, there are not

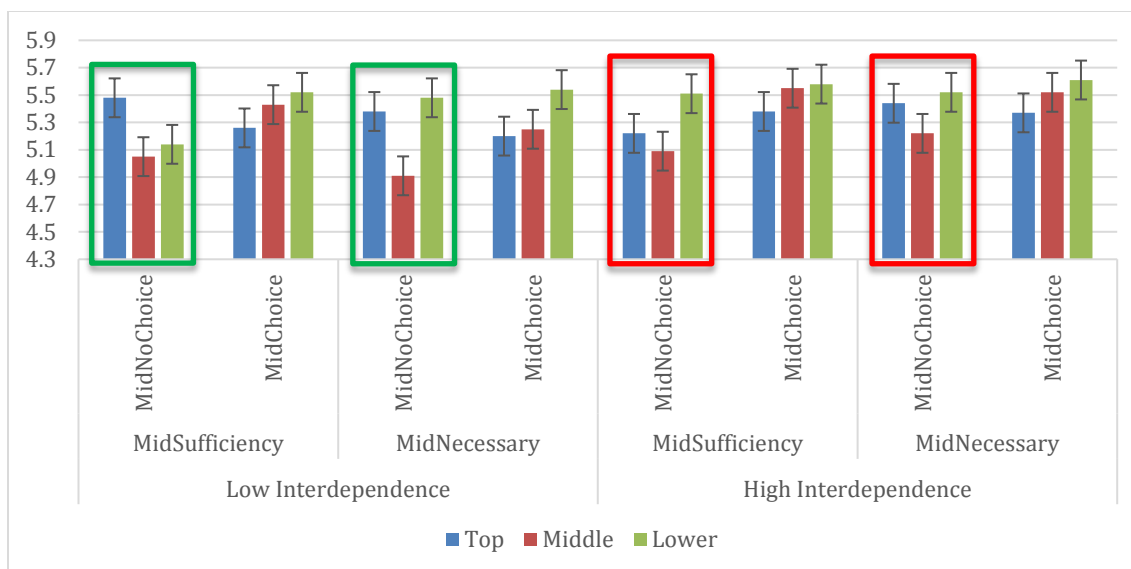


Figure 8a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice by Interdependence 4-way interaction – within group comparisons.

many differences between the different actors.

At low levels of interdependence (see the left side of Figure 8a), the middle manager not having a choice, regardless of whether his actions forced or enabled the lower agent, resulted in the middle manager being held less culpable than the top manager ($M_{\text{Suf}} = 5.05$ vs. 5.48 , $p = .0009$; $M_{\text{Nec}} = 4.91$ vs. 5.38 , $p = .0002$; see the green boxes in Figure 8a). Also, the middle manager's actions merely enabling the outcome and him not having a choice, resulted in him being less culpable than the lower agent ($M = 4.91$ vs. 5.48), $p < .0001$ (see the rightmost green box in Figure 8a). These findings indicated that, when the middle manager had the combination of variables that should result in the least culpability (his own actions were only necessary for the lower agent, and the middle manager had no choice), he was indeed held least culpable. Oddly, the lower agent was considered more culpable when the middle manager had a choice (a factor that we would expect to lessen lower agent culpability). This might be a result of

less interdependent individuals wanting to hold the closest person to the wrong doing more culpable, regardless of pressure from the person in front of them in the causal chain.

To better understand the present findings, we represent the very same data previously displayed in a different format, such that difference between those high and low in interdependence are more easily apparent. When comparing individuals high and low in interdependence, a few differences emerged, although not necessarily those we expected (see Figure 8b). First, the situation in which the middle manager should be least culpable (he had no choice and his actions were merely necessary, not sufficient, to bring about the lower agent's actions), he was rated to be more culpable among high-interdependence individuals than low-interdependence individuals ($M = 5.22$ vs 4.91), $p < .01$ (see the red box in Figure 8b). This might demonstrate an inclination among those high in interdependence to see the middle manager as part of the larger set of circumstances and therefore hold him more culpable. Conversely, individuals low in interdependence might take a closer look at specific factors that allowed the middle manager to exercise some agency.

Second, when the middle manager's actions were sufficient and he had no choice, there was a difference between high and low Interdependence individuals. Low-interdependence people held the top manager most culpable ($M = 5.48$), whereas high-interdependence people held the lower agent most culpable ($M = 5.51$), $p < .01$ (see the green box in Figure 8b). This might be a result of low-interdependence individuals placing more emphasis on the person who initiated the chain of events regardless of middle manager actions. On the other hand, high-interdependence individuals see the sufficient actions of the middle manager as acting in an exculpatory function for the top

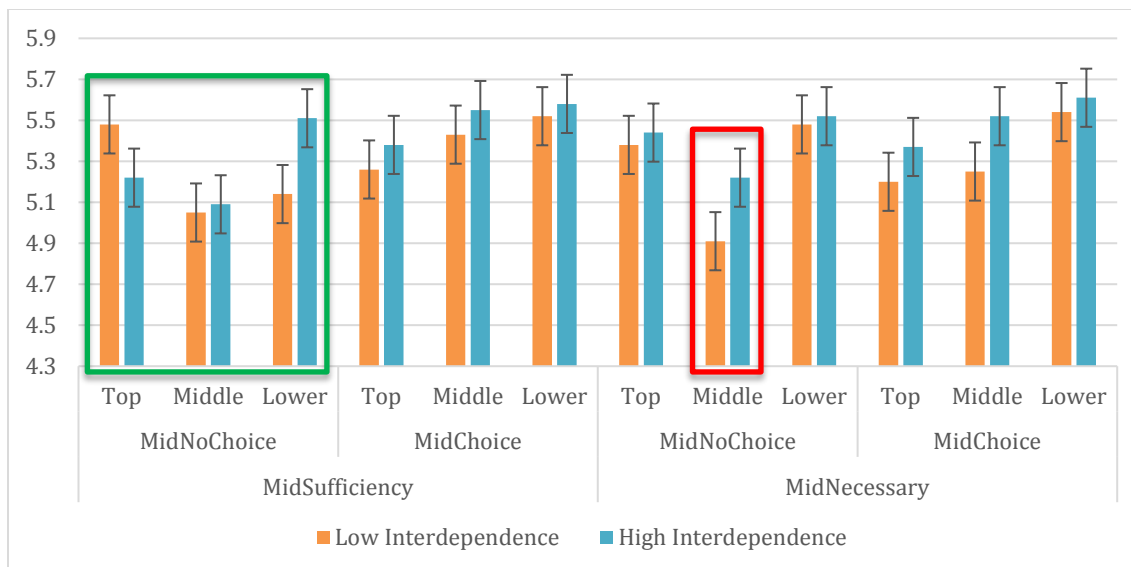


Figure 8b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice by Interdependence 4-way interaction – between groups comparisons.

manager, but inculpatory for the lower agent.

Summary. We expected that individuals high in interdependence would be more cognizant of the social hierarchy and situational pressures that impacted the actors. We expected that they would be more inclined to see all the actors as a part of the larger collective, thereby taking those actions into account in their decision-making processes. These predictions were somewhat reflected in the data in that in general, there were not many differences in the culpability attributed to the different actors. Because high-interdependence individuals viewed the behaviors among actors as interrelated, they were less likely to make some of the finer distinctions. By contrast, individuals lower in interdependence, were more inclined to be influenced by proximity to the wrongdoing – resulting in increased culpability for the lower agent. In general, individuals high in interdependence may see the middle manager as part of the larger set of circumstances and therefore hold him more culpable, whereas individuals low in interdependence may

take a closer look at specific factors that allowed the middle manager to exercise some agency.

Independence Moderates Experimental Effects

When we included the individual difference variable of independence in the model, we found some of the same significant interactions as we did with the basic model (Actor, $\chi^2(2) = 25.95, p < .0001$; Actor by Middle Manager Choice, $\chi^2(2) = 18.48, p < .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 10.85, p = .0044$; Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Foreseeability, $\chi^2(2) = 9.28, p = .0096$). In addition to these results, we found two additional interactions involving independence: 1) a three-way interaction of Actor by Top Manager Sufficiency/Necessity by Top Manager Choice that was qualified by Independence, $\chi^2(2) = 9.93, p = .0070$, and 2) a four-way interaction of Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Choice that was moderated by Independence, $\chi^2(2) = 9.70, p = .0078$.

For the Actor by Top Manager Sufficiency/Necessity by Top Manager Choice by Independence model, there was only one condition that resulted in significant differences for individuals high in independence (see the right side of Figure 9). When the top manager's actions forced the actions of the middle manager and the top manager did not have a choice in this decision, the middle manager was less culpable than the top manager and lower agent ($M = 5.26$ vs. 5.63 and 5.62 , respectively), $ps < .01$ (see the red box in Figure 9). In this situation we are seeing that Top Manager Sufficiency/Necessity is taking precedent over choice. Even though the top manager did not have a choice, the fact that he forced the middle manager to act resulted in decreased middle manager

culpability.

At low levels of independence (1 *SD* below the mean), there was a significant difference for top manager culpability between when he did and did not have a choice (when the top manager's actions were sufficient; $M = 5.56$ vs. 5.11), $p = .0037$. As expected, when the top manager had no choice, he was found less culpable. There was also a significant difference for top manager culpability between when his actions were necessary versus sufficient (when the top manager had a choice; $M = 5.14$ vs. 5.56), $p = .0007$. Again, these results are what we would expect – namely that when the top manager forces the actions of the middle manager he should be more culpable compared to when he only enables those actions. We also see that the top manager's actions forcing those of the middle manager and the top manager having a choice resulted in the middle manager being held less culpable than the top manager ($M = 5.16$ vs. 5.56), $p = .0015$ (see the green box in Figure 9).

The findings indicated that the top manager requiring the action of the middle manager resulted in the middle manager being seen as least culpable, even when the top manager did not have a choice. As we expected, when the top manager made the action by the middle manager unavoidable (Top Manager Sufficiency) and the same top manager had a choice, he was held most culpable. Less obvious were the findings for lower agent. It seemed that low-independence individuals might have been relying more so on the impact of the top manager setting everything in motion by making a choice.

The top manager, when his actions were sufficient (i.e. predetermined the middle manager's actions) and he had a choice ($M = 5.56$; see the green box in Figure 9), was held more culpable than himself ($M = 4.96$), $p = .0054$, and the middle manager ($M =$

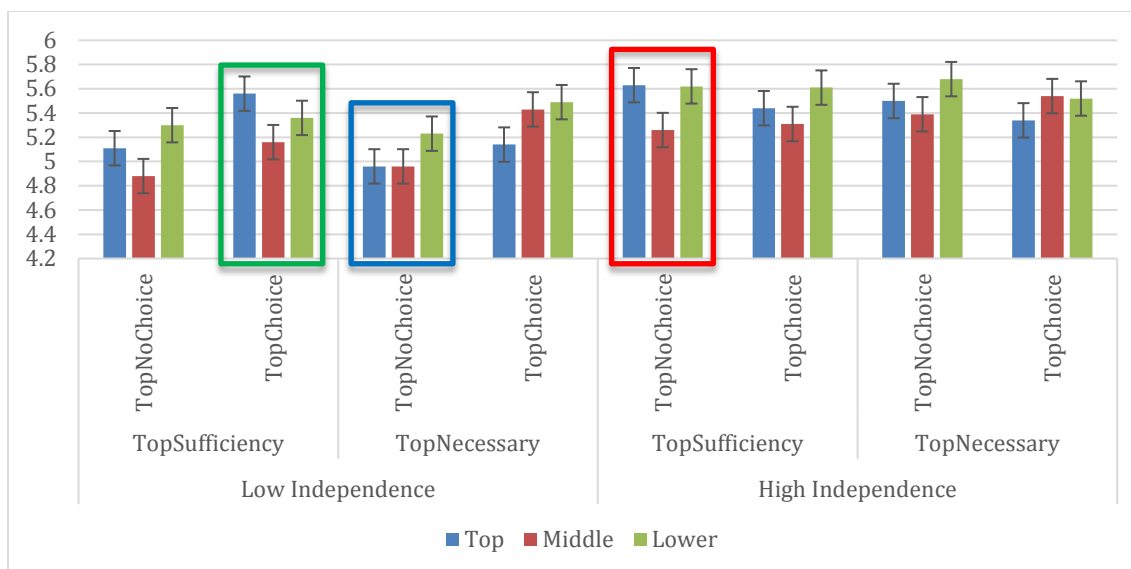


Figure 9. Actor by Top Manager Sufficiency/Necessity by Top Manager Choice by Independence 4-way interaction.

4.96), $p = .0058$, when the top manager's actions were necessary and the top manager had a choice (see the blue box in Figure 9). The findings comparing the top manager when his actions were sufficient and he had a choice to when the top manager's actions were necessary for (i.e. enabled) the middle manager and top manager had no choice is exactly what we would expect – in the first situation we saw maximum culpability and in the second we saw limited culpability. As for the middle manager, it appeared that the combination of enabling (but not requiring) the middle manager to act and the top manager having a choice resulted in low culpability attributed to the low middle manager. It may be that the further along in the chain an individual was, the more the low-independence individuals took the actions of those earlier in the chain into account.

When comparing individuals high and low in independence, there were two significant differences. When the top manager did not have a choice, regardless of Top Manager Sufficiency/Necessity, individuals high in independence held all three actors

significantly more culpable than their low-independence counterparts, all $ps < .01$. This finding clearly shows that the top manager not having a choice is exculpatory for those low in independence, but it does not have the same effect on those high in independence. In general, high-independence individuals tend to hold all of the actors fairly culpable, whereas low-independence individuals show a great deal of variation in culpability based on the scenario.

For the Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Choice by Independence model, there were a few significant findings for individuals high in independence. When neither the top nor middle managers had a choice, the middle manager was held less culpable than the top manager (regardless of Middle Manager Sufficiency/Necessity; $M_{\text{Suf}} = 5.11$ vs. 5.57 , $p = .0061$; $M_{\text{Nec}} = 5.10$ vs. 5.60 , $p = .0033$; see the red boxes in Figure 10a), and he was less culpable than the lower agent (only when the middle manager's actions were necessary; $M = 5.10$ vs. 5.62), $p = .0022$ (see the rightmost red box in Figure 10a). These results were as expected for the middle manager (i.e., him not having a choice should result in lower culpability for him and higher culpability for the lower agent) but were not what we expected for the top manager. Even when the top manager did not have a choice, he was still held quite culpable. In general, it appears that individuals high in independence may favor consistently holding the individuals who started and ended the chains most culpable, and allowing the middle manager culpability to fluctuate more based on the circumstances.

At low levels of independence, there are no differences when comparing similar conditions within the Middle Manager Sufficiency and Necessity conditions, all $ps > .01$. There are, however, differences in attributions of culpability to actors within the other

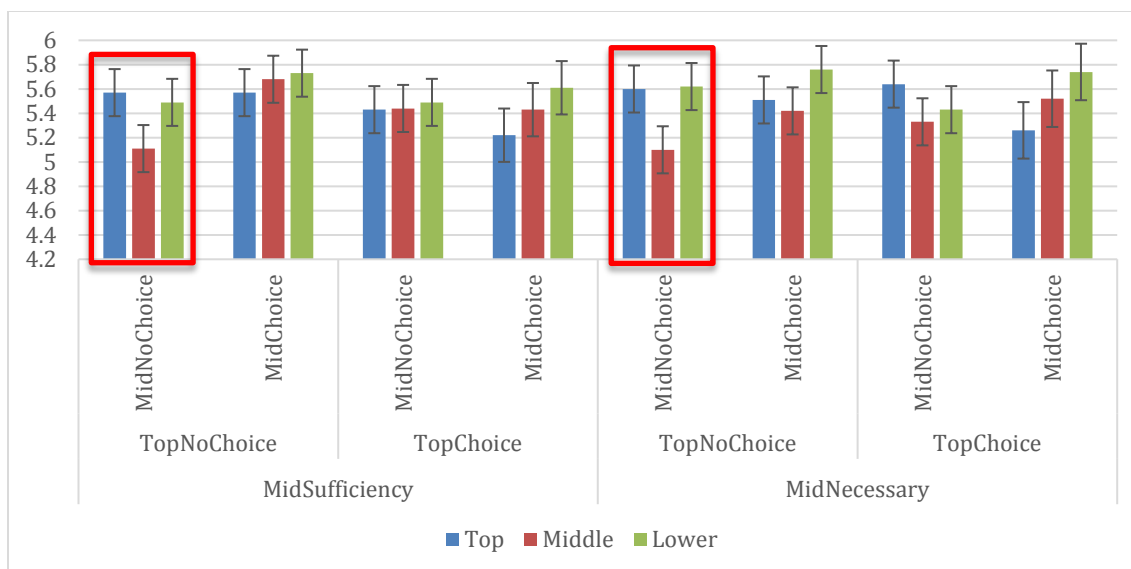


Figure 10a. Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Choice by Independence 5-way interaction – high Independence participants.

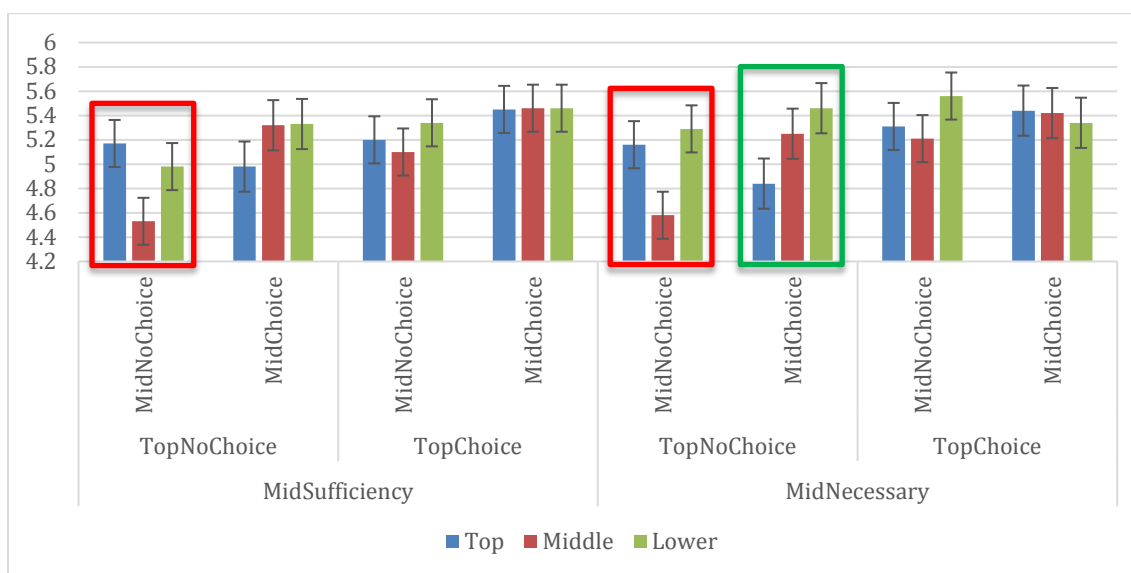


Figure 10b. Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Choice by Independence 5-way interaction – low Independence participants.

conditions (see Figure 10b). First, when both the top and middle managers had no choice (regardless of Middle Manager Sufficiency/Necessity), the middle manager was held less

culpable than the top manager and the lower agent ($M_{\text{Suf}} = 4.53$ vs. 5.17 and 4.98, respectively, $p_s < .01$; $M_{\text{Nec}} = 4.58$ vs. 5.16 and 5.29, $p_s < .01$; see the red boxes in Figure 10b). This finding is similar to that obtained for high-independence individuals, although the means are lower. There was also a significant difference in culpability when the middle manager's actions were a necessary precondition for the lower agent's actions, the middle manager had a choice, and the top manager did not have a choice. In this scenario, the top manager was found less culpable than the lower agent ($M = 4.84$ vs. 5.46), $p = .0010$ (see the green box in Figure 10b).

When comparing individuals high and low in independence, when the top manager had a choice, there were no differences between these two groups (see Figure 10c). When the top manager did not have a choice, however, individuals high in independence found all of the actors to be significantly more culpable than their low-independence counterparts with the exception of five situations (see Figure 10d). When

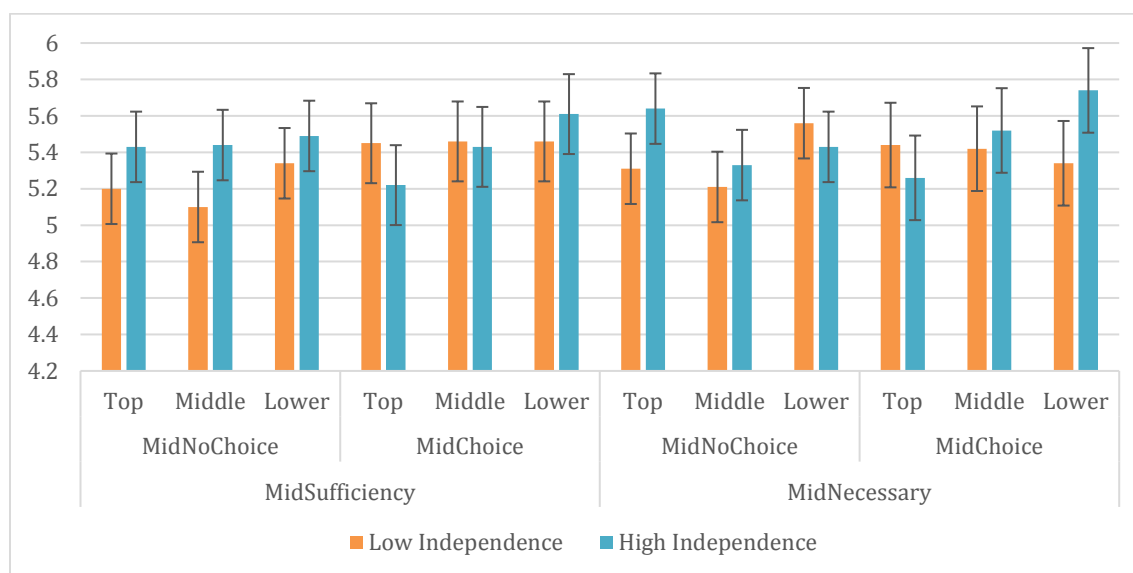


Figure 10c. Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Choice by Independence 5-way interaction – examining high and low Independence individuals in the conditions where the Top Manager had a choice.

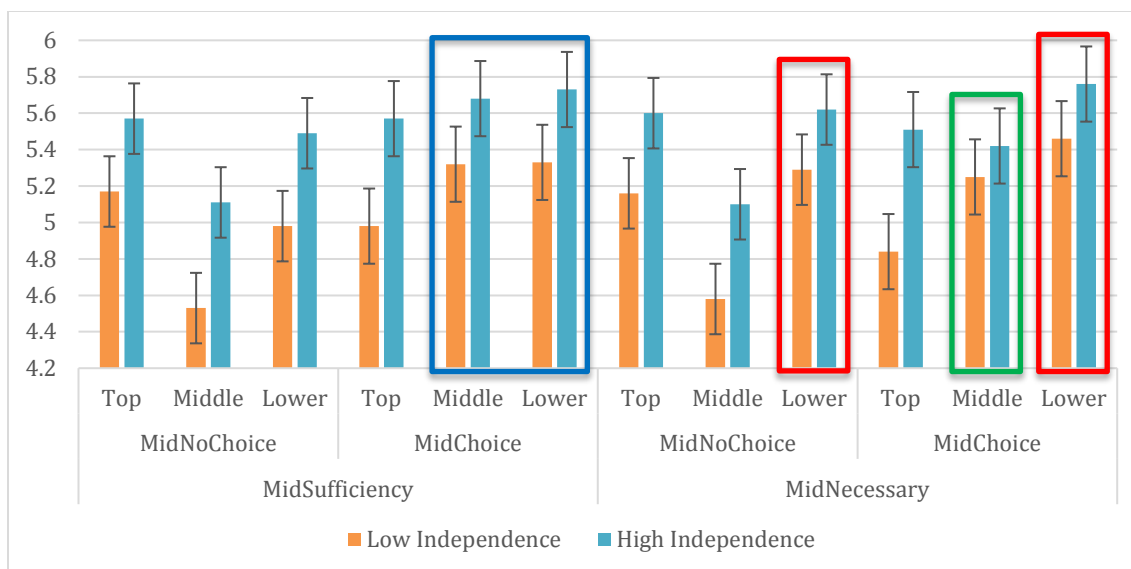


Figure 10d. Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Middle Manager Choice by Independence 5-way interaction – examining high and low Independence individuals in the conditions where the Top Manager had no choice.

the middle manager's actions were necessary (regardless of whether or not the middle manager had a choice), the lower agent was found equally culpable for both the high and low Independence individuals (see the red boxes in Figure 10d). The same pattern emerged for the middle manager when the middle manager's actions were necessary but not sufficient for the lower agent's actions, and when the middle manager had a choice (see the green box in Figure 10d). Finally, when the middle manager's actions were sufficient and he had a choice both the middle manager and lower agent were found equally culpable by high and low Independence individuals (see the blue box in Figure 10d). It is worth noting that the relationships are still in the same direction as those that were significant, they just did not reach the point of statistical significance.

Summary. For individuals high in independence, choice is very important – their apparent focus was on agency. It appeared that the further along in the chain an

individual was, the more the low-independence individuals took the actions of those earlier in the chain into account. Low-independence individuals might have been emphasizing the impact of the top manager setting everything in motion by making a choice and deemphasizing the actions/thoughts of the middle manager and lower agent. When the top manager had a choice, the culpability ratings for all actors tended to be high. Conversely, when the top manager did not have a choice, there was much greater variability in the ratings and especially the middle manager was held less culpable by individuals low in independence, compared to those high in independence (who still tended to have somewhat higher levels of culpability for all the actors).

Attributional Complexity Moderates Experimental Effects

When we included the individual difference variable of Attributional Complexity (AC) in the model, we found a few of the same significant interactions as we did with the basic model (i.e., Actor, $\chi^2(2) = 24.81, p < .0001$; Actor by Middle Manager Choice, $\chi^2(2) = 19.32, p < .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 11.42, p = .0033$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice, $\chi^2(2) = 10.25, p = .0059$). In addition to these findings there were also several interactions that implicated AC. All findings that include AC had significant pairwise results for individuals within the high AC group. When examining individuals low in AC, there was only one scenario in one interaction that had any significant differences within their group. This overall finding was consistent with theory. Individuals lower in AC are not inclined to think very in-depth about all of the different elements involved in the scenarios, resulting in fewer differences arising between scenarios. Conversely those higher in AC enjoy and engage

in critical thinking, and therefore differentiated more between the different scenarios.

First, there was a significant Actor by AC interaction, $\chi^2(2) = 10.25, p = .0059$, indicating that for individuals high in AC, the lower agent ($M = 5.57$) was held significantly more culpable than both the upper manager ($M = 5.35$), $p = .0009$, and middle manager ($M = 5.21$), $p < .0001$ (see Figure 11). Individuals low in AC showed no differences in attributed culpability as a function of experimental conditions (all $ps > .01$).

This interaction was further qualified by Top Manager Sufficiency/Necessity, $\chi^2(2) = 13.46, p = .0012$ (see Figure 12). For high AC individuals, there were two specific conditions that resulted in lower culpability for the top and middle managers when compared to all the actors, for the middle manager when the top manager's actions were sufficient ($M = 5.09$) and for the top manager when his actions were necessary ($M = 5.22$). Specifically, the middle manager (when the top manager's actions were sufficient for his actions) was significantly less culpable than both the top manager ($M = 5.48$), $p =$

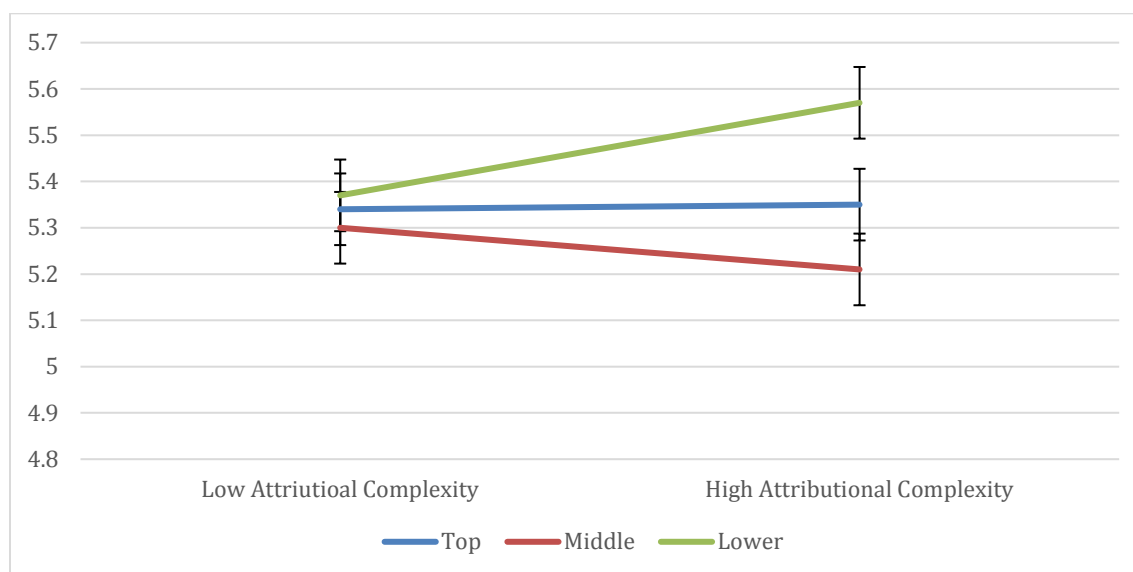


Figure 11. Actor by Attributional Complexity 2-way interaction.

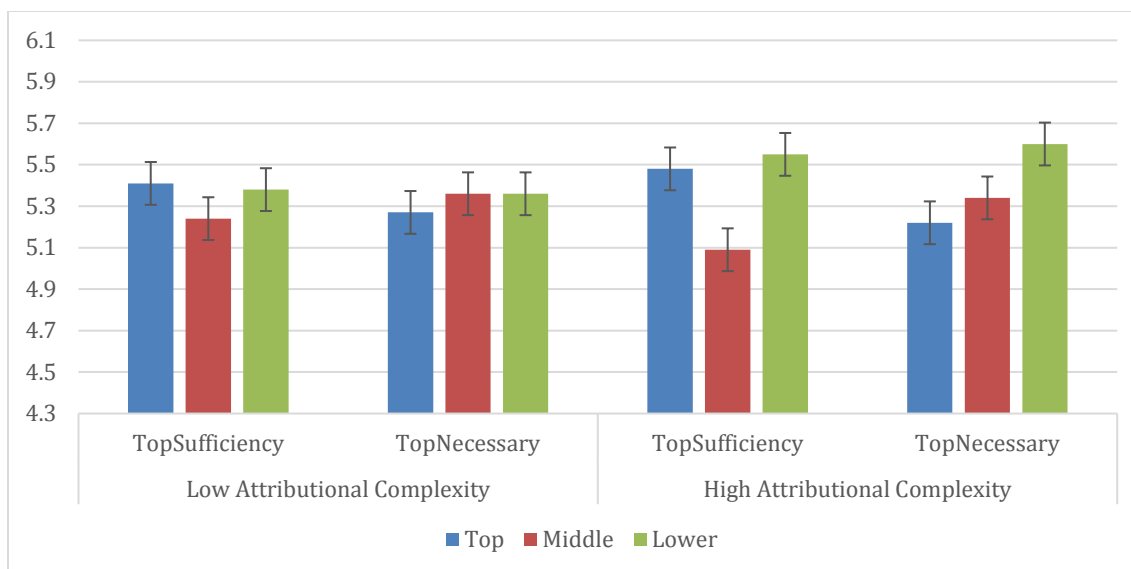


Figure 12. Actor by Top Manager Sufficiency/Necessity by Attributional Complexity 3-way interaction.

.0002, and the lower agent ($M = 5.55$), $p < .0001$. For the second condition, the top manager (when his actions were necessary, but not sufficient for the middle manager's own actions) was rated significantly less culpable than the lower agent ($M = 5.60$), $p < .0001$. It was expected that the middle manager should be held less culpable when the top manager's actions were sufficient to bring about the middle manager's actions (as this should, and did, result in higher culpability for the top manager). Following that same logic, it was also expected that, when the top manager's actions were merely necessary, but not sufficient for the middle manager's actions, the top manager would be seen as less culpable. Also, since the lower agent is the closest to the wrongdoing, it was expected that he would face higher culpability regardless of the top manager's sufficiency/necessity. Once again, there were no significant findings for individuals low in AC. For comparing individuals high and low in AC, there were no differences between these two groups.

The Actor by Top Manager Sufficiency/Necessity by AC interaction was further qualified by Middle Manager Choice, $\chi^2(2) = 9.41, p = .0090$ (see Figure 13). The addition of middle manager choice shows that the previous results for high AC individuals only hold under certain variations of Middle Manager Choice. Specifically, it was only when the middle manager had a choice that the top manager received less culpability when his actions were necessary ($M = 5.11$; see the red box in Figure 13) compared to the lower agent (regardless of whether the top manager's actions were sufficient [$M = 5.58, p = .0079$; see the green box in Figure 13] or necessary [$M = 5.68, p = .0003$; see the red box in Figure 13]). Similarly, it was only when the middle manager had no choice that the middle manager was found less culpable than the top manager and lower agent when the top manager's actions were sufficient ($M = 4.79$ vs. 5.52 and 5.52 , respectively), $ps < .01$ (see the blue box in Figure 13). Overall, these results show the power of Middle Manager Choice. When the middle manager had a choice, the top manager was held less culpable; when the middle manager had no choice, the top manager was held more culpable.

For individuals low in AC, there was one scenario that resulted in significant differences. When the top manager's actions forced the actions of the middle manager (was sufficient for it) and the middle manager had no choice, the top manager was held more culpable than the middle manager ($M = 5.09$ vs. 5.43), $p = .0057$ (see the orange box in Figure 13). This finding is one that we would expect based on theory and it is also one of the most obvious connections to make, and thus it is logical that if low AC individuals are going to pick up on one set of relationships it would be this one.

When comparing individuals high and low in AC across different experimental

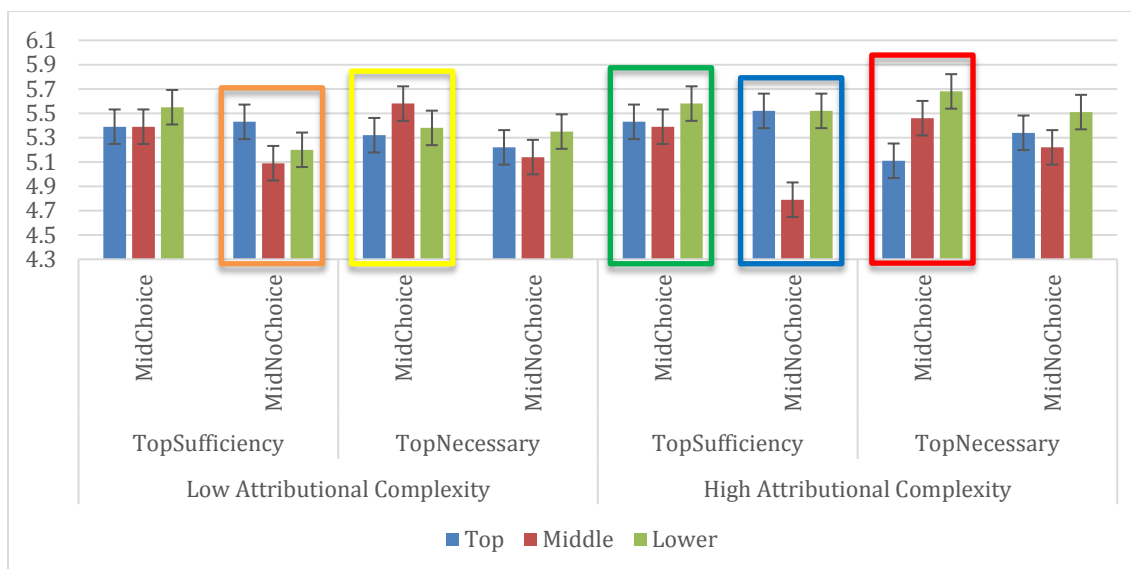


Figure 13. Actor by Top Manager Sufficiency/Necessity by Middle Manager Choice by Attributional Complexity 4-way interaction.

conditions, three differences emerged. When the top manager's actions were sufficient and the middle manager did not have a choice, high AC individuals saw this combination of elements as exculpatory for the middle manager and inculpatory for the lower agent (see the blue and orange boxes in Figure 13). In other words, compared to individuals low in AC, high-AC participants deemed the middle manager less culpable (as his actions were literally determined by others) and the lower agent more culpable. For both low- and high-AC individuals the difference between the lower agent and top manager was not significant, but for high-AC individuals, the culpability of the middle manager dropped significantly. Also, when the top manager's actions were necessary but not sufficient for the middle manager's actions, and the middle manager had a choice, high-AC individuals found the lower agent significantly more culpable than their low-AC counterparts (see the red and yellow boxes in Figure 13). For low-AC individuals, there was no significant difference between the three actors in this condition. For high-AC individuals, however,

the top manager was significantly less culpable than the middle manager and lower agent.

There was also a significant four-way interaction involving Actor by Middle Manager Foreseeability by Middle Manager Choice by AC, $\chi^2(2) = 11.81, p = .0027$. These results show that for high-AC individuals, the middle manager was held less culpable than the top manager and lower agent when he had no choice (regardless of Middle Manager Foreseeability; $M_{\text{For}} = 5.02$ vs. 5.51 and 5.39, respectively, $ps < .01$; $M_{\text{NoFor}} = 4.99$ vs. 5.35 and 5.64, $ps < .01$; see the red boxes in Figure 14). This pattern mimics that of the Top Manager Sufficiency and Middle Manager No Choice condition in the previous interaction. Another significant difference showed that when the middle manager had a choice (regardless of Middle Manager Foreseeability), the top manager was less culpable than the lower agent ($M_{\text{For}} = 5.25$ vs. 5.58, $p = .0078$; $M_{\text{NoFor}} = 5.29$ vs. 5.68, $p = .0018$; see the green boxes in Figure 14). These results highlight the importance of Middle Manager Choice. When the middle manager had a choice, he was considered less culpable whereas the culpability attributed to the other actors was higher. Conversely, the middle manager not having a choice had an exculpatory effect on the top manager and an inculpatory effect on the lower agent. Middle-manager choice and foreseeability, however, did not always have the expected outcomes. For example, the lower agent was held highly culpable when the middle manager had foreseeability and a choice – a condition that should have a mitigating impact on lower agent culpability. There were no significant differences for low-AC individuals.

Again, we compared individuals high and low in AC (i.e. 1 *SD* above and 1 *SD* below the mean of the AC distribution) to obtain a better sense of the impact of this individual difference variable. In this instance, we do not provide a separate figure to

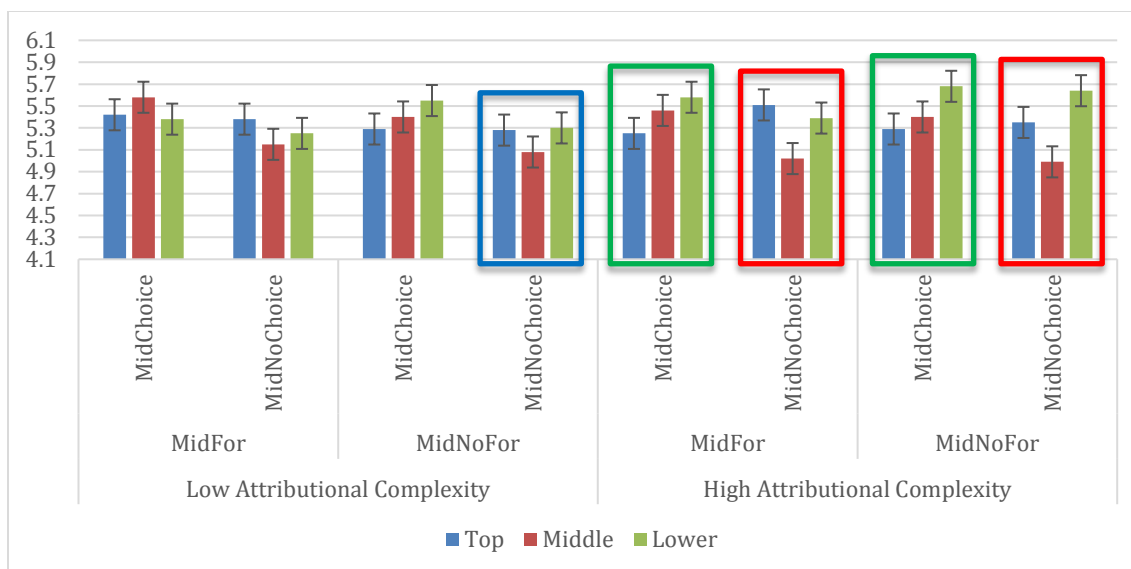


Figure 14. Actor by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 4-way interaction.

illustrate the data already summarized in Figure 14, simply because there was only a single pairwise difference. When the middle manager did not have a choice over his actions, and when he did not foresee the consequences of his actions, high-AC individuals regarded the lower agent much more culpable than their low AC counterparts (see the rightmost red box and the blue box in Figure 14). Though high- and low-AC participants did not vary in the culpability attributed to the middle manager, this finding emphasizes that high-AC individuals pay attention to the fact that the negative consequences (brought about by the lower agent) were not caused deliberately and knowingly by the middle manager. Under these circumstances, high-AC individuals placed more emphasis on proximity to the wrongdoing; indeed, high-AC people attributed greater culpability to the lower agent than the middle manager ($M = 5.64$ vs. 4.99), $p < .01$, whereas low AC individuals attributed equal levels of culpability.

This four-way interaction was further qualified by the inclusion of Middle

Manager Sufficiency/Necessity, $\chi^2(2) = 10.90, p = .0043$. This now five-way interaction merely qualified the above-discussed difference between high and low AC individuals in attribution of culpability to the lower agent when the middle manager had no choice and did not foresee the consequences of his actions. Upon closer examination, this very difference between high and low AC individuals only emerged when the middle managers merely enabled the lower agent (i.e., Middle Manager Necessity), but did not require the lower agent to act in ways that resulted in harm. This provided more evidence that the middle manager should not be held culpable.

Parallel to the five-way interaction just discussed, there was another variable that moderated the previously discussed four-way interaction summarized before in Figure 14. Specifically, this four-way interaction was further moderated by Top Manager Sufficiency/Necessity, $\chi^2(2) = 12.29, p = .0021$. As before, closer examination of whether high AC and low AC individuals differed focused on the part of the experimental design when the middle manager did not have a choice and when he could not foresee the consequences of this actions. Our discussion of the results focuses on an illustration of the differences between high-AC and low-AC individuals. As the reader will recall, AC is a continuous variable for which we merely present point estimates at 1 *SD* above and 1 *SD* below the mean of the AC distribution.

As illustrated in Figure 15b (right-most panel), when the decision of the top manager merely enabled the actions of middle manager there were really no appreciable differences in how low-AC and high-AC individuals evaluated the culpability of the middle manager and of the lower agent. Yet, this changed when the top manager's decision constrained the decision of the middle manager. As illustrated in Figure 15a

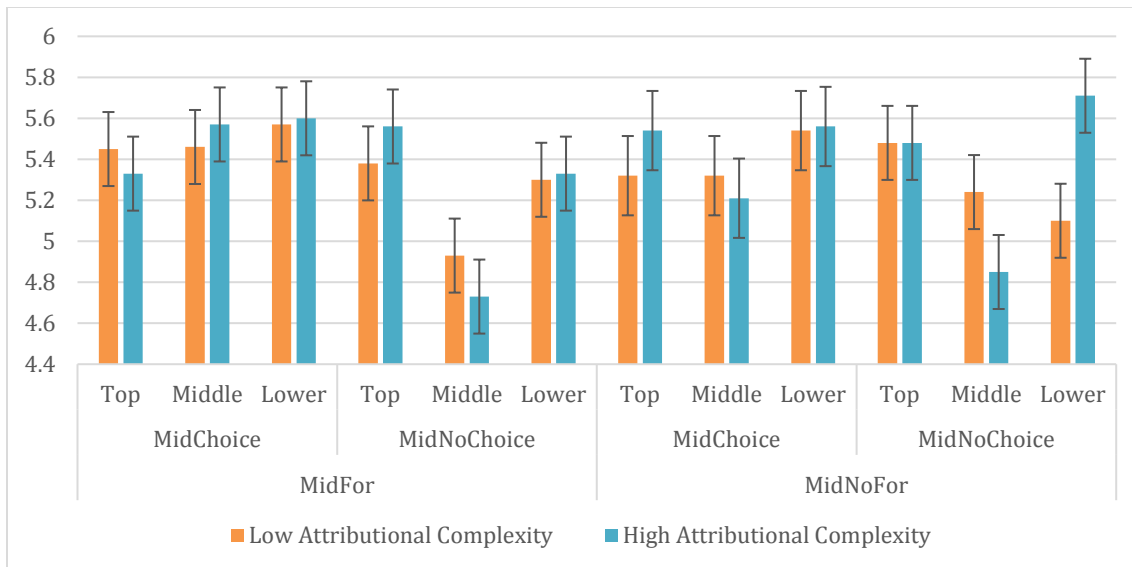


Figure 15a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way Interaction – examining high and low Attributional Complexity individuals in the conditions where the Top Manager’s actions were sufficient.

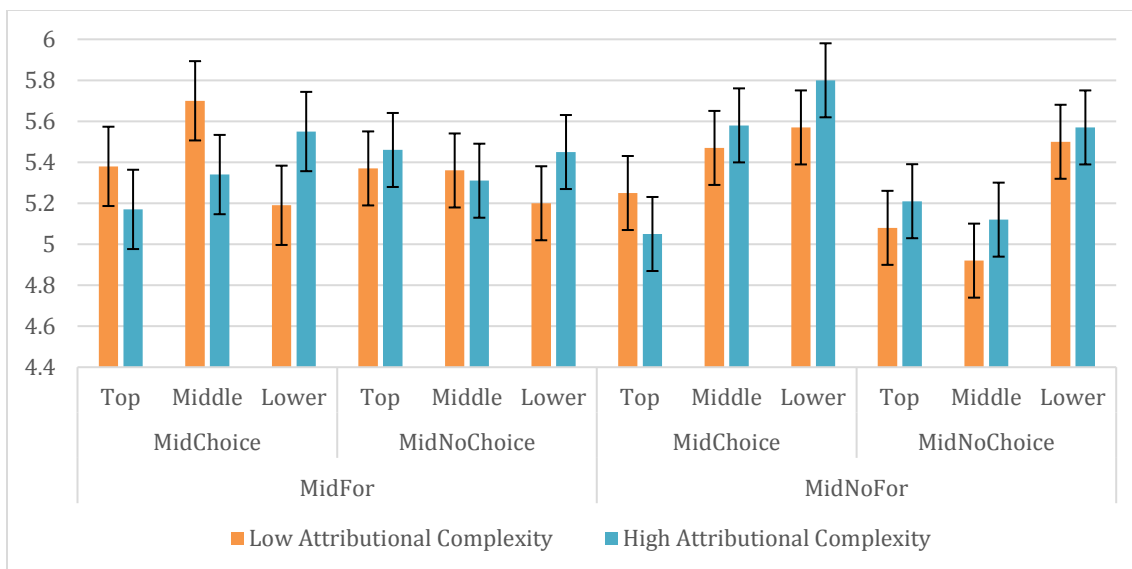


Figure 15b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way Interaction – examining high and low Attributional Complexity individuals in the conditions where the Top Manager’s actions were necessary.

(right-most panel), those high in AC thought that the middle manager was less culpable

than did the low-AC individuals. Conversely, high-AC individuals considered the lower agent much more culpable than their low AC counterparts.

The above Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by AC five-way interaction was further qualified by Top Manager Foreseeability, resulting in a six-way interaction, $\chi^2(2) = 12.69, p = .0018$. This interaction mainly suggested that the effects illustrated in the five-way interaction (i.e., when the top manager's actions were sufficient and the middle manager had no choice or foreseeability, high AC individuals held the middle manager less culpable and the lower agent more culpable than their low AC counterparts) only held in certain conditions. Specifically, the finding for culpability toward the lower agent was only significant when the top manager did not have foreseeability ($M_{HiAC} = 5.81$ vs. $M_{LoAC} = 4.95$), $p < .01$. The significant differences between those high and low in AC for culpability toward the middle manager were no longer significant when Top Manager Foreseeability was included.

Finally, the previously discussed Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by AC five-way interaction was further qualified by Top Manager Choice, resulting in a six-way interaction, $\chi^2(2) = 10.11, p = .0064$. Some of the previously significant differences between those high and low in AC in the attribution of culpability to the lower agent were no longer significant when Top Manager Choice was included. For a more detailed explanation of these higher-order five- and six-way interactions, see Appendix D.

Summary. Analyses involving individual differences in attributional complexity illustrate two basic points. First, high-AC individuals seem to be generally more attentive

to the potentially complicated ways in which a causal chain of human actions brought about an outcome. High-AC individuals were generally more responsive to experimental variations. Second, we observed that not all context variables are created equal. Even low-AC individuals were responsive to actors having a choice (or not), with choice thus being a general ingredient in the attribution of blame (see Hilton et al., 2016). However, only high-AC individuals seemed to be responsive to differences in Sufficiency/Necessity and foreseeability. It appears that these experimental manipulations required a greater willingness to engage in complex reasoning than low AC individuals are willing to invest. Consistently, among low-AC individuals none of these experimental manipulations resulted in significant differences. This is expected, as these individuals do not enjoy engaging in effortful thought and likely did not pick up on all of the nuances of the different scenarios.

Political Ideology Moderates Experimental Effects

When we included the individual difference variable of political ideology in the model, we found a few of the same significant interactions as we did with the basic model (i.e., Actor, $\chi^2(2) = 23.05, p < .0001$; Actor by Middle Manager Choice, $\chi^2(2) = 17.78, p = .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 10.24, p = .0060$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice, $\chi^2(2) = 9.36, p = .0093$). In addition to these findings there were also several interactions that were impacted by political ideology. For simplicity's sake, we refer to estimates for participants at 1 *SD* above the mean as pertaining to conservatives, and those at 1 *SD* below the mean as pertaining to liberals.

First, there was an Actor by Middle Manager Foreseeability by Political Ideology interaction, $\chi^2(2) = 14.51, p = .0007$. For conservative individuals (1 *SD* above the mean), the lower agent (when the middle manager does not have foreseeability, $M = 5.71$) was held significantly more culpable than the top manager (regardless of Middle Manager Foreseeability, $M_{\text{For}} = 5.41, p = .0097$; $M_{\text{NoFor}} = 5.18, p < .0001$), the middle manager (regardless of Middle Manager Foreseeability, $M_{\text{For}} = 5.39, p = .0034$; $M_{\text{NoFor}} = 5.26, p < .0001$), and himself (when the middle manager did have foreseeability, $M = 5.44$), $p = .0029$. In other words, conservatives were inclined to find the lower agent more culpable when the middle manager did not have foreseeability about the potential negative impact of his decision. Among liberal individuals (1 *SD* below the mean), when the middle manager did not have foreseeability, he was less culpable than the top manager and the lower agent ($M = 5.16$ vs. 5.41 and 5.40, respectively), $ps < .01$.

When comparing liberal and conservative individuals, there was one difference between these two groups. When the middle manager did not have foreseeability, conservatives held the top manager significantly less culpable and the lower agent significantly more culpable than their liberal counterparts. In other words, conservatives placed much more culpability on the lower agent when the middle manager did not have foreseeability and did not attribute much culpability to the individual who initiated the causal chain. Liberals, however, did not differentiate between the upper and lower agent agents in terms of the attributed level of culpability, though they held the middle manager less culpable than both. Therefore, for liberals, the middle manager not having foreseeability only impacted the middle manager, making him less culpable.

This three-way Actor by Middle Manager Foreseeability by Political Ideology

interaction was further qualified by Top Manager Choice, four-way interaction $\chi^2(2) = 9.68, p = .0079$. For conservatives in the Top Manager Choice condition, the lower agent (when the middle manager did not have foreseeability and the top manager did not have a choice, $M = 5.77$) was more culpable than the middle manager, when the top manager had no choice (regardless of Middle Manager Foreseeability, $M_{\text{For}} = 5.30, p = .0068$; $M_{\text{NoFor}} = 5.11, p < .0001$; see the red boxes in Figure 16a). The lower agent was also more culpable than the top manager, when the middle manager did not have foreseeability and the top manager had no choice ($M = 5.06$), $p < .0001$ (see the rightmost red box in Figure 16a). The lower agent (when the middle manager did not have foreseeability and the top manager had a choice, $M = 5.66$) was more culpable than the top manager ($M = 5.30$), $p = .0058$ (see the green box in Figure 16a). In other words, the lower agent was consistently more culpable than the top and middle managers when the middle manager had no foreseeability and the top manager did not have a choice.

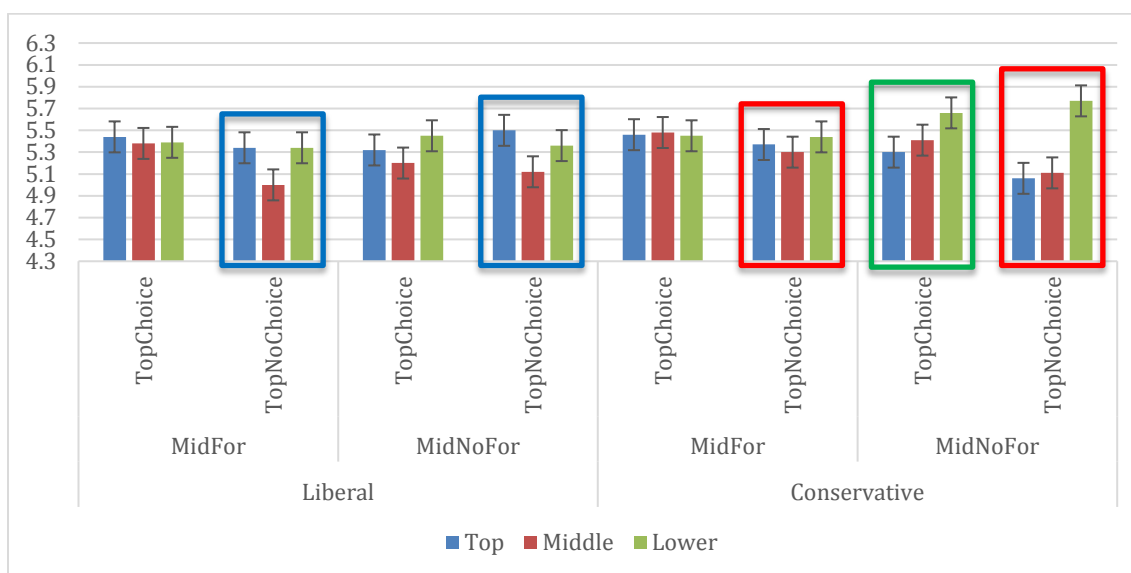


Figure 16a. Actor by Middle Manager Foreseeability by Top Manager Choice by Political Ideology 4-way interaction – within group comparisons.

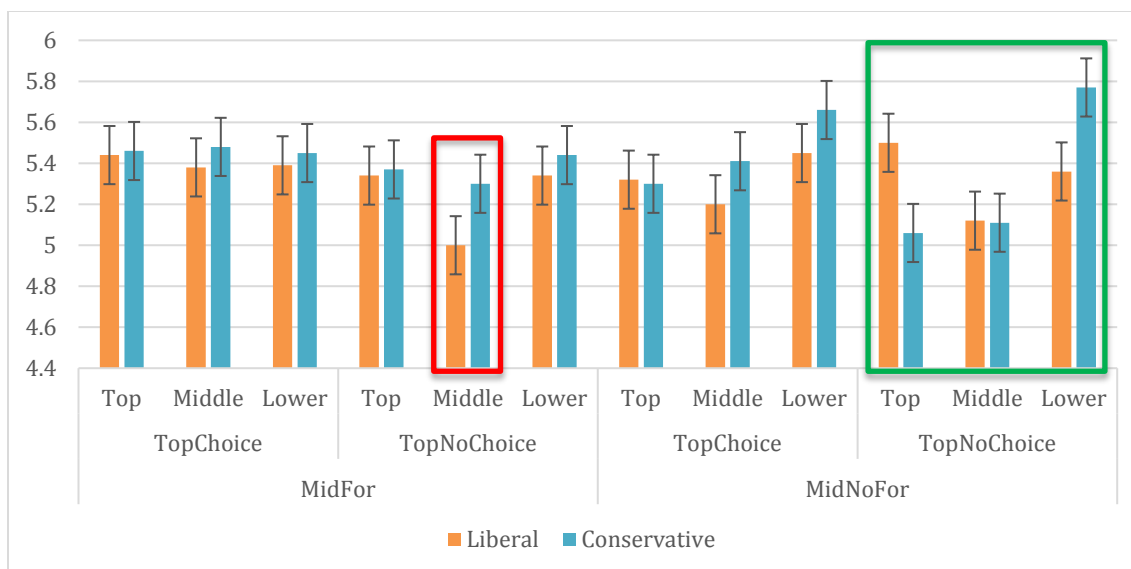


Figure 16b. Actor by Middle Manager Foreseeability by Top Manager Choice by Political Ideology 4-way interaction – between groups comparisons.

For liberals, when the top manager had no choice (regardless of Middle Manager Foreseeability) the middle manager was less culpable than the top manager ($M_{For} = 5.00$ vs. 5.34, $p = .0055$; $M_{NoFor} = 5.12$ vs. 5.50, $p = .0021$; see blue boxes in Figure 16a). The middle manager was also less culpable than the lower agent, when the top manager had no choice and the middle manager had foreseeability ($M = 5.00$ vs. 5.35), $p = .0057$ (see leftmost blue box in Figure 16a). In general, when the middle manager did not have a choice, he was held less culpable and the top manager and lower agent were held more culpable.

When comparing more liberal and conservative individuals directly (i.e. point estimates at 1 SD above and below the mean of the political ideology distribution), there were two conditions that resulted in differences between these two groups. First, when the top manager had no choice and the middle manager had foreseeability, liberals held the middle manager significantly less culpable than their conservative counterparts (see

the red box in Figure 16b). Oddly, in this scenario, liberals viewed Middle Manager Foreseeability as an exculpatory factor for the middle manager, when in general, Foreseeability as an exculpatory factor for the middle manager, when in general, foreseeability tends to be associated with greater blame (e.g., Hilton et al., 2016). Second, when the top manager had no choice and the middle manager did not foresee the consequences of his actions, this condition had an exculpatory effect on conservatives' perceptions of the top manager's culpability and an inculpatory effect on conservatives' perceptions of the lower agent's culpability (see the green box in Figure 16b). Conservatives lowered their culpability towards the top manager to match the lower culpability of the middle manager, while also increasing the culpability toward the lower agent.

The aforementioned three-way Actor by Middle Manager Foreseeability by Political Ideology interaction was also qualified by Middle Manager Sufficiency/Necessity, $\chi^2(2) = 24.78, p < .0001$ (see Figure 17a). For conservatives, we observed the

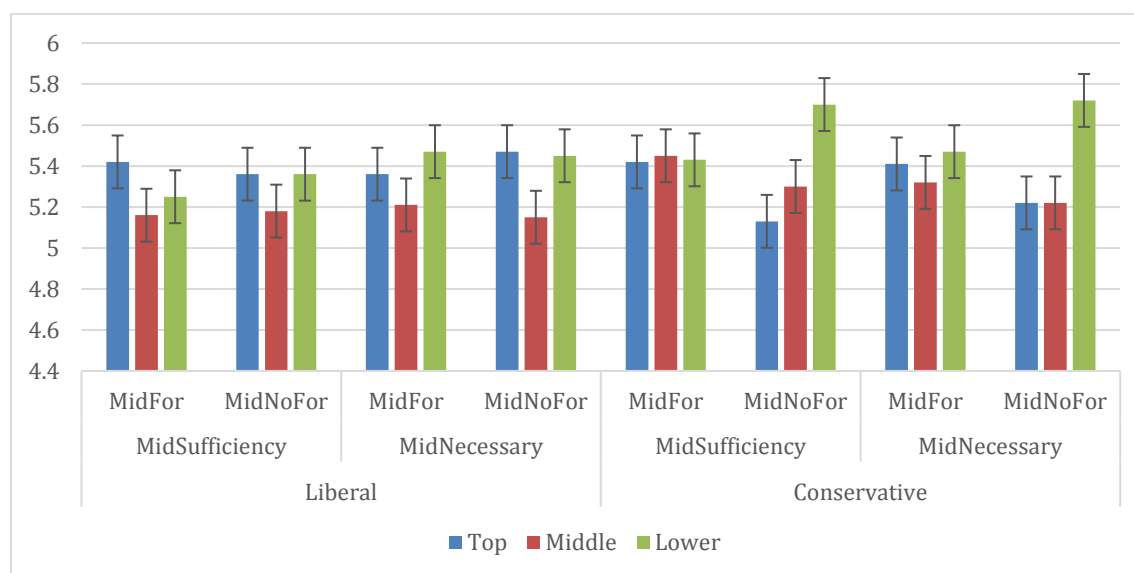


Figure 17a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology 4-way interaction – within group comparisons.

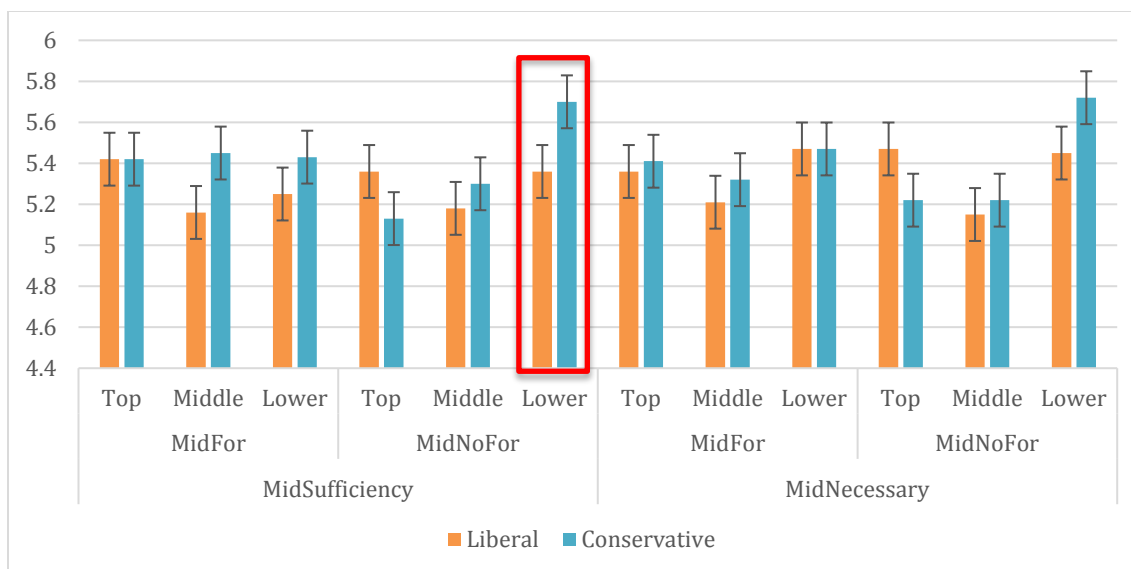


Figure 17b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology 4-way interaction – between groups comparisons.

same patterns as previously reported for the three-way interaction. In other words, for conservatives the inclusion of Middle Manager Sufficiency/Necessity to the model did not qualify the combination of Actor, Middle Manager Foreseeability, and Political Ideology (with the lower agent in the Middle Manager Not Foreseeable condition being rated as more culpable than all other actors in all other conditions). In general, for this and the previous interaction, conservatives are finding the lower agent more culpable than the upper and middle managers.

For liberals, the significant findings from the three-way interaction were shown to only hold when the middle manager's actions were necessary. In other words, the finding that the middle manager is held less culpable than the top manager and lower agent when the middle manager does not have foreseeability, was only reliable when the middle manager's actions were necessary (see Figure 17a).

When comparing more liberal and conservative individuals, there was only one

condition that resulted in significant differences between these two groups. When the middle manager's actions were sufficient and he did not have foreseeability, conservatives rated the lower agent more culpable than the liberals (see the red box in Figure 17b). It is possible that in this situation liberals saw the sufficiency of the middle manager's actions (i.e. his actions determined the lower agent's actions) as mitigating the culpability of the lower agent. At the same time, conservatives seemed to be more focused on proximity by rating the person closest to the harmful actions most culpable.

The Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology four-way interaction was further qualified by several different variables. Namely, Top Manager Sufficiency/Necessity, $\chi^2(2) = 20.65, p < .0001$, Top Manager Foreseeability, $\chi^2(2) = 9.85, p = .0073$, Top Manager Choice, $\chi^2(2) = 18.14, p = .0001$, and Middle Manager Choice, $\chi^2(2) = 16.36, p = .0002$. When examining the differences between liberals and conservatives for each of these interactions we found that the significant difference noted for the four-way interaction (i.e., conservatives hold the lower agent more culpable than liberals when the middle manager's actions were sufficient and not foreseeable), only emerged under specific conditions. When the top manager's actions were sufficient, the top manager had foreseeability, the top manager did not have a choice, or the middle manager did not have a choice, conservatives still held the lower agent more culpable than liberals, When, however, the top manager's actions were necessary, the top manager did not have foreseeability, the top manager had a choice, or the middle manager had a choice, there was no longer a significant difference between conservative and liberal culpability for the lower agent.

In other words, when the top manager forced the actions of the middle manager,

could foresee the consequences of his actions, or had a choice, or the middle manager had a choice (all things that should lessen culpability to those further along in the chain), conservatives were still holding the lower agent significantly more culpable than liberals. Therefore, these variables were impacting liberals in the way that we would expect (i.e., having a mitigating effect), whereas conservatives were still holding the last person in the chain more culpable regardless of the upper and middle manager's behavior/knowledge.

The final five-way interaction was the Actor by Middle Manager Foreseeability by Top Manager Choice by Political Ideology four-way interaction with the addition of Middle Manager Choice, $\chi^2(2) = 11.77, p = .0028$. In the four-way interaction, the condition that resulted in significant differences between conservatives and liberals was when the middle manager did not have foreseeability and the top manager had no choice. In this scenario, conservatives found the lower agent more culpable and the top manager less culpable than liberals. When examining the five-way interaction we found that it was only when the middle manager had a choice that this difference was significant.

Therefore, when the middle manager had a choice and the top manager did not have a choice, conservatives held the top manager less culpable than liberals. This indicated a primary effect of choice on Top Manager Culpability for conservatives, whereas liberals may have been taking other factors into consideration when determining Top Manager Culpability. For the lower agent, the middle manager having a choice increased culpability for conservatives. It appeared that in this scenario, the culpability ratings of liberals did not vary much between the different actors, whereas conservatives held the top manager least culpable and the lower agent most culpable (with the middle manager in the middle).

The previously discussed Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology five-way interaction was further qualified by Top Manager Sufficiency/Necessity, $\chi^2(2) = 20.10$, $p < .0001$, Top Manager Foreseeability, $\chi^2(2) = 9.26$, $p = .0098$, or Middle Manager Choice, $\chi^2(2) = 9.26$, $p = .0098$. Each of these additional variables showed that it was only under certain conditions that the significant differences between liberals and conservatives that existed in the five-way interaction persisted in the six-way interaction. In the five-way interaction, conservatives considered the middle manager more culpable than liberals when the middle manager's actions were sufficient to bring about the lower agent's actions, the middle manager had foreseeability, and the top manager had no choice. Conservatives also rated the lower agent as more culpable than liberals when the middle manager's actions were sufficient for the lower agent's actions, the middle manager did not have foreseeability, and the top manager had no choice.

For the six-way interaction including Top Manager Sufficiency/Necessity, we observed that it was only when the top manager's actions were sufficient that the results described in the last paragraph were found. When we examined the six-way interaction including Top Manager Foreseeability, we found that the previously significant differences between more liberal and conservative individuals related to the middle manager were no longer significant. Also, for the lower agent, it was only when the top manager had foreseeability that the pattern of the previous five-way interaction emerged. For the six-way interaction including Middle Manager Choice, we found that it was only when the middle manager had no choice that these results were found.

The previously discussed Actor by Middle Manager Foreseeability by Top

Manager Choice by Middle Manager Choice by Political ideology five-way interaction, was further qualified by Top Manager Sufficiency/Necessity, $\chi^2(2) = 18.89, p < .0001$. The finding from the five-way interaction that conservatives hold the lower agent more culpable than liberals when the middle manager did not have foreseeability, the top manager did not have a choice, and the middle manager did have a choice, materialized only when the top manager's actions were necessary. The other finding from the five-way interaction (that conservatives held the top manager less culpable than liberals when the middle manager did not have foreseeability, the top manager did not have a choice, and the middle manager did have a choice), was no longer significant in the six-way interaction.

The previously discussed Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political ideology five-way interaction, was further qualified by Middle Manager Choice, $\chi^2(2) = 13.88, p = .0010$. The significant results for the five-way interaction only held when the middle manager had no choice. First, it was only when the top manager's actions were sufficient and the middle manager's actions were sufficient, foreseeable, and he had no choice that conservatives held the middle manager more culpable than liberals ($M_{\text{Con}} = 5.08, M_{\text{Lib}} = 4.45$), $p < .01$. Second, it was only when the top manager's actions were sufficient and the middle manager's actions were sufficient, not foreseeable, and he had no choice that conservatives held the lower agent more culpable than liberals ($M_{\text{Con}} = 5.69, M_{\text{Lib}} = 5.17$), $p < .01$.

This six-way interaction was further qualified by Top Manager Foreseeability, $\chi^2(2) = 12.21, p = .0022$. The results for the seven-way interaction indicated that the

finding for middle manager culpability was only significant when the top manager had foreseeability, and the finding for lower agent culpability was no longer significant. For a more detailed explanation of these higher-order five-, six-, and seven-way interactions, see Appendix E.

Summary. Liberals tended to only consider those individuals culpable who directly engaged in an action/had foreseeability. By contrast, among conservatives the individual closest to the action resulting in harm tended to be rated more culpable than the upper and middle managers. Conservatives found the lower agent more culpable even when his actions were predetermined by the middle manager. Frequently, liberals were found considering several different elements when arriving at their culpability attributions, whereas conservatives seem primarily focused on proximity. It also appeared that liberals were more likely to consider elements further up the causal chain (e.g., the top manager's actions) when determining the culpability of the actor at the end of the chain. By comparison, conservatives were more likely to only go as far as the middle agent when considered the lower agent's culpability. As a result, conservatives held the top manager less culpable than liberals and they held the lower agent more culpable than liberals.

Small Business Attitudes Moderate Experimental Effects

When we included the individual difference variable of Feelings Toward Small Businesses (i.e., Small Businesses) in the model, we found some of the same significant interactions as we did with the basic model (Actor, $\chi^2(2) = 24.14, p < .0001$; Actor by Middle Manager Choice, $\chi^2(2) = 19.66, p < .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 12.30, p = .0021$). In addition, we also

found three other interactions involving Feelings Toward Small Businesses: 1) an Actor by Small Business two-way interaction, $\chi^2(2) = 13.52, p = .0012$; 2) an Actor by Middle Manager Sufficiency/Necessity by Small Business three-way-interaction, $\chi^2(2) = 14.78, p = .0006$; and 3) an Actor by Middle Manager Sufficiency/ Necessity by Top Manager Choice by Small Business four-way interaction, $\chi^2(2) = 15.73, p = .0004$.

The Actor by Small Businesses interaction revealed that, for individuals who liked small business (+1 *SD* above the mean of the Feelings Toward Small Businesses distribution), the lower agent ($M = 5.54$) was held more culpable than the middle manager ($M = 5.34$), $p = .0051$. For individuals who liked Small Businesses less (-1 *SD* below the mean), the same pattern held: the lower agent ($M = 5.41$) was rated more culpable than the middle manager ($M = 5.17$), but the effect was slightly more pronounced, $p = .0007$. The results suggested that, when individuals liked small businesses, they were actually more critical of a business actors' wrongdoing compared to those who liked small businesses less (see Figure 18). In our scenarios, one might argue that the lower

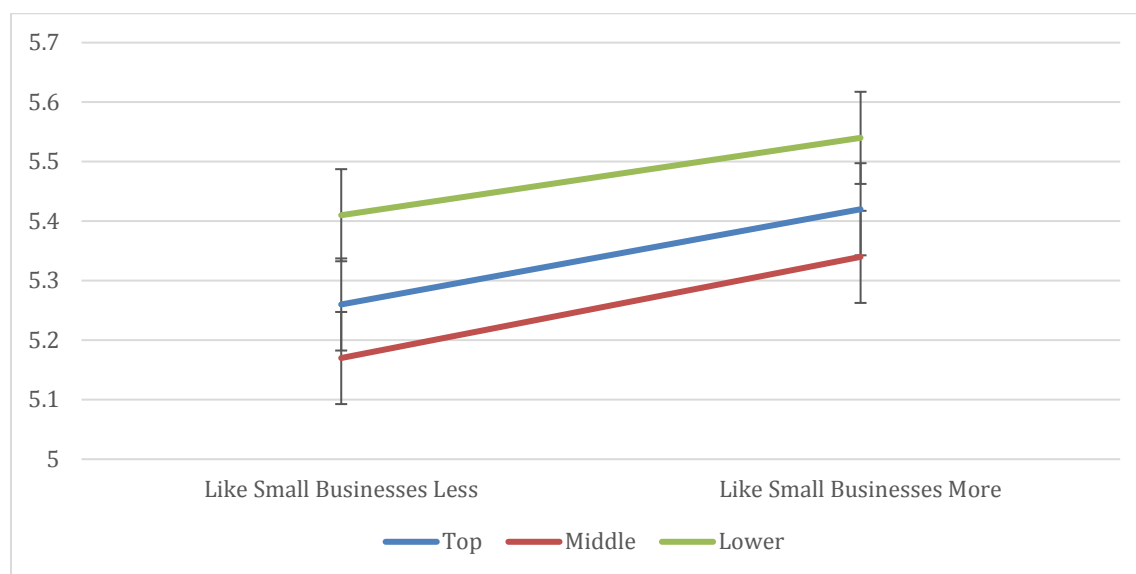


Figure 18. Actor by Feelings toward Small Businesses 2-way interaction.

agent was most closely related to a “small business” and the top and middle managers were explicitly noted as belonging to a larger business organization. In two of our scenarios the agent who did the wrongdoing was actually a vendor, and in the other two he was a man who worked in a lower position within the company.

Because the Actor by Middle Manager Sufficiency/Necessity by Small Businesses three-way interaction was further qualified by Top Manager Choice we focus on explaining the findings for the four-way interaction. For most (but not all) conditions we observed a pattern of the lower agent being held most culpable, followed by the top manager, and then the middle manager held, but these findings were not consistent. For individuals who liked small businesses (see the right side of Figure 19a), the only significant differences occurred between the middle manager and lower agent. Specifically, the middle manager was held less culpable than the lower agent when the top manager had no choice, regardless of Middle Manager Sufficiency/Necessity ($M_{\text{Suf}} = 5.23$ vs.

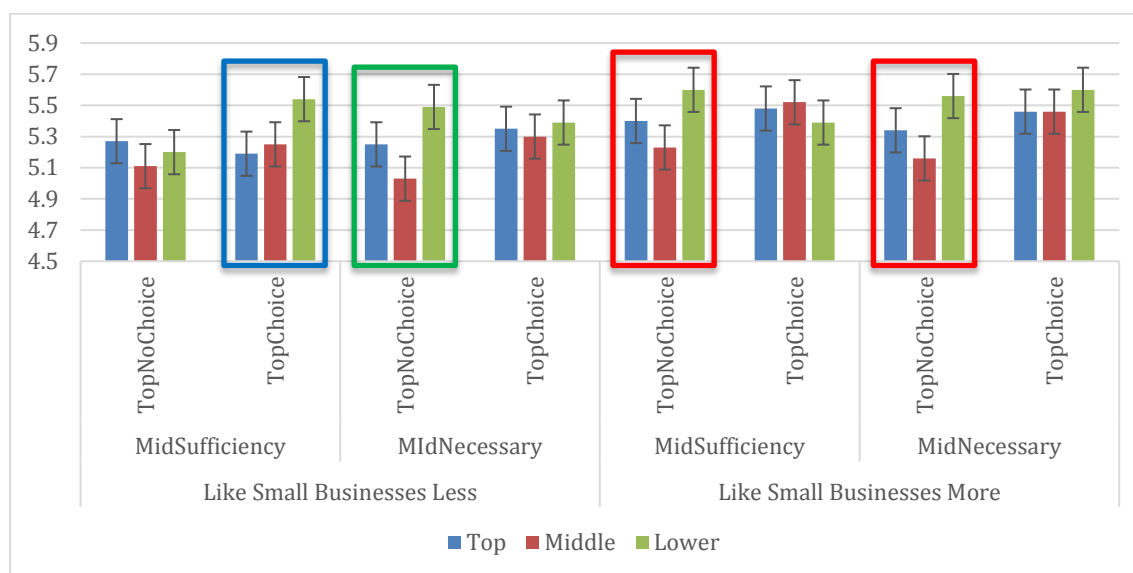


Figure 19a. Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Feelings toward Small Businesses 4-way interaction – within group comparisons.

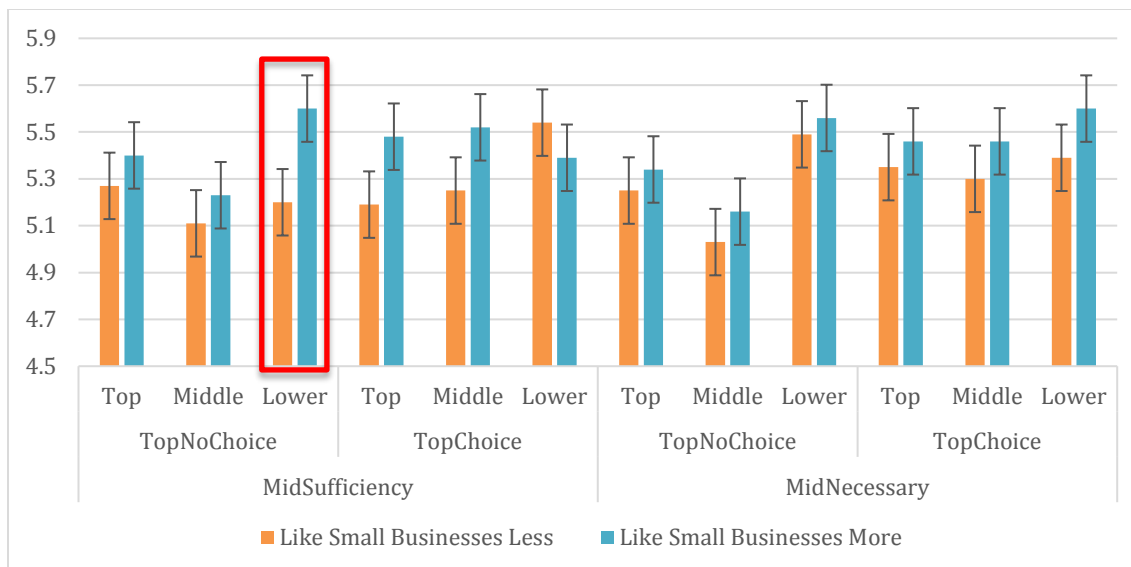


Figure 19b. Actor by Middle Manager Sufficiency/Necessity by Top Manager Choice by Feelings toward Small Businesses 4-way interaction – between groups comparisons.

5.60, $p = .0029$; $M_{Nec} = 5.16$ vs. 5.56, $p = .0012$; see the red boxes in Figure 19a).

For individuals who liked small businesses less (-1 SD), there were again only two conditions that resulted in significant differences (see the left side of Figure 19a). When the top manager had no choice and the middle manager's actions merely enabled the actions of the lower agent (necessity), the middle manager was less culpable than the lower agent ($M = 5.03$ vs. 5.49), $p = .0003$ (see the green box in Figure 19a). The second scenario that resulted in significant differences was when the top manager had a choice and the middle manager's actions were sufficient. In this scenario, the top manager was rated less culpable than the lower agent ($M = 5.19$ vs. 5.54), $p = .0053$ (see the blue box in Figure 19a).

Comparing those who like small businesses more or less, a clear difference emerged for only one condition. When the middle manager's actions were sufficient to bring about actions of the lower agent and the top manager had no choice, people who

liked small businesses held the lower agent more culpable compared to those who liked small businesses less ($M = 5.60$ vs 5.20), $p < .01$ (see the red box in Figure 19b).

Summary. It appears that people who like small businesses are placing more weight on a variety of different factors included in the scenarios compared to those who do not like them as much. When individuals liked small businesses, they were actually slightly more critical of a business actors' (i.e., the lower agent) wrongdoing compared to those who liked small businesses less. Both those who like small businesses more or less end up finding the actor most closely associated with a small business in the scenarios (i.e., the lower agent) more culpable, but for different reasons. Individuals who did not like small businesses tended to discount actions by the upper and middle managers that might have acted to mitigate the lower agent culpability, resulting in increased small business culpability; conversely, individuals who liked small businesses tended to hold the small business to a higher level of accountability, and thus found them more culpable when their actions resulted in a wrongdoing.

Big Business Attitudes Moderate Experimental Effects

When we included the individual difference variable of Feelings Toward Big Businesses (Big Business) in the model, we found a few of the same statistical effects that previously emerged in the basic model (i.e., Actor, $\chi^2(2) = 25.24$, $p < .0001$; Actor by Middle Manager Choice, $\chi^2(2) = 19.76$, $p < .0001$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Choice, $\chi^2(2) = 13.26$, $p = .0013$; Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice, $\chi^2(2) = 11.08$, $p = .0039$). Surprisingly, there was also an Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle

Manager Choice interaction that was not found in the basic model, $\chi^2(2) = 9.90, p = .0071$. Because this particular effect does not involve the moderator discussed here (Feelings Toward Big Business) and because this particular interaction only emerged in the present analysis, it is not discussed further. Yet, Big Business was involved in a several significant interactions.

There was a significant Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Big Business four-way interaction, $\chi^2(2) = 9.82, p = .0074$, summarized in Figure 20a. It reflected that under some circumstances, participants who favored Big Business were more willing to attribute culpability to the lower agent and, to a lesser extent, on the middle manager whereas, in at least one instance they were less likely to attribute culpability to the top manager. For convenience, Figure 20b displays the same data as Figure 20a, but with estimates for stronger supporters of Big Business (1 *SD* above the mean) and weaker supporters of Big Business (1 *SD* below the mean) being displayed side-by-side.

Compared to individuals more skeptical of Big Business, Big Business supporters were more likely to think of the lower agent as more culpable when the middle manager did not foresee the consequence of his actions, regardless of whether the middle manager's actions enabled or triggered (i.e. was sufficient) the lower agent's own actions (see the red boxes in Figure 20b). Conversely, when the middle manager's action predetermined (were sufficient for) the lower agent's actions, Big Business supporters thought of the top manager as less culpable (see the green box in Figure 20b). This is consistent with the idea that, at least in the eyes of Big Business supporters, actions by middle management may protect top management from blame if the middle manager's

actions were sufficient to account for any harm brought about the “person on the ground” (i.e., lower agent). Consistent with this general idea, Big Business supporters were more likely to hold the middle manager culpable when the middle manager’s actions were sufficient to predetermine the lower agent’s action and when the middle manager was also able to foresee the consequences of his actions (see the blue box in Figure 20b).

Put differently, and referring back to Figure 20a, in at least some instances, Big Business supporters were more likely to hold the lower agent more culpable than the middle manager and the top manager. This occurred when the middle manager could not foresee what was going to happen both when his actions were sufficient to predetermine the behavior of the lower agent ($M = 5.73$ vs. 5.27 and 5.12, respectively, $ps < .01$), and when he merely enabled the lower agent to behave in a way that resulted in harm ($M = 5.73$ vs. 5.31 and 5.26, respectively, $ps < .01$; see the red boxes in Figure 20a).

Conversely, those who favored Big Business less, always held the top manager and the

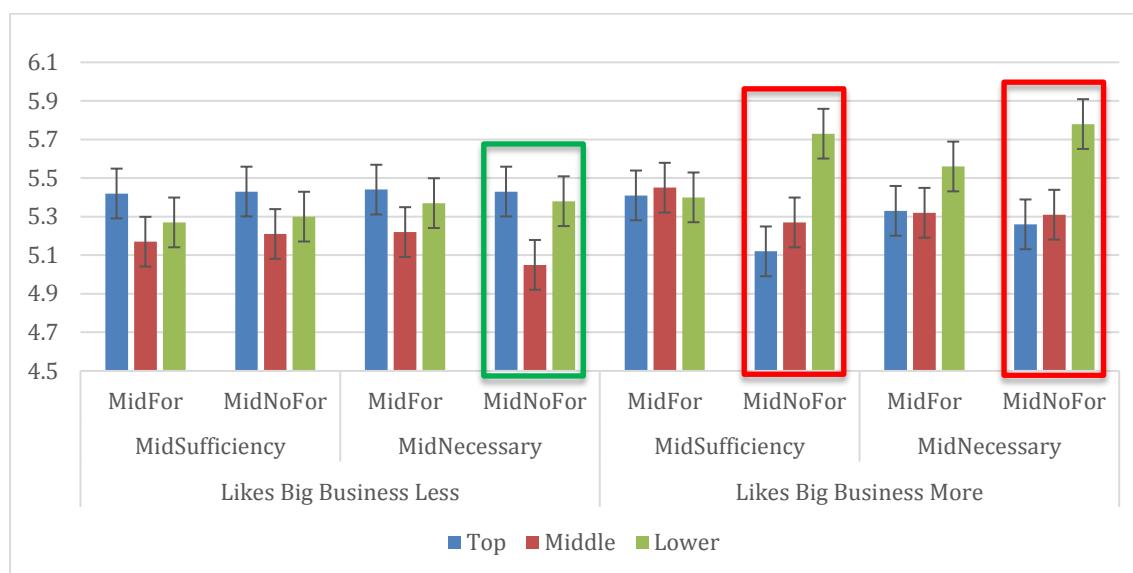


Figure 20a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 4-way interaction – within group comparisons.



Figure 20b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 4-way interaction – between groups comparisons.

lower agent (“implementor”) equally culpable, whereas they would consider the middle manager less culpable when his actions only enabled, but did not predetermine the lower agent’s actions, and when he could not foresee the consequence of his actions.

At low levels of Big Business (-1 *SD*) we found a consistent pattern such that the top manager was held most culpable, followed by the lower agent, and lastly followed by the middle manager. There was only one condition, however, in which this pattern had significant differences. When the middle manager’s actions were necessary and he did not have foreseeability, the middle manager was less culpable than the top manager and lower agent ($M = 5.05$ vs. 5.43 and 5.38, respectively), $ps < .01$ (see the green box in Figure 20a).

This interaction was further qualified by Top Manager Sufficiency/Necessity, $\chi^2(2) = 9.77, p = .0076$. To illustrate an already complex pattern, we focus here on

illustrating the findings by comparing estimates of Big Business supporters (1 *SD* above the mean) and Big Business skeptics (1 *SD* below the mean) side by side (see Figures 21a and 21b). Inspection revealed that the apparent readiness of Big Business supporters in attributing culpability to the lower agent when the middle manager did not foresee the consequences of his actions was confined to a situation when the top manager enabled (necessity), but did not predetermine the middle manager's actions (see the red boxes in Figure 21a). No reliable differences, apparent in overlapping error bars, emerged when the top manager's decision predetermined, i.e. was sufficient for, the actions taken by those downstream of him (Figure 21a, left-hand side) or when the middle manager was able to foresee what would happen as a function of his decision (Figure 21b).

When comparing individuals low and high in Big Business, there were several conditions that resulted in significant differences when the middle manager did not have foreseeability. First, when the top manager's actions were sufficient and the middle manager's actions were necessary, those low in Big Business held the middle manager significantly less culpable than those high in Big Business (see the green box in Figure 21a). More specifically, low Big Business individuals acted how we would expect people to respond in this situation (namely find the top manager more culpable and the middle manager less culpable), but high Big Business individuals did not attribute different levels of culpability to the upper manager and the middle manager. Second, when the top manager's actions were necessary for the middle manager's actions, regardless of Middle Manager Sufficiency/Necessity, individuals high in Big Business rated the lower agent more culpable than those low in Big Business (see the red boxes in Figure 21a). When the middle manager had foreseeability, there were no significant differences (see Figure



Figure 21a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had no foreseeability.

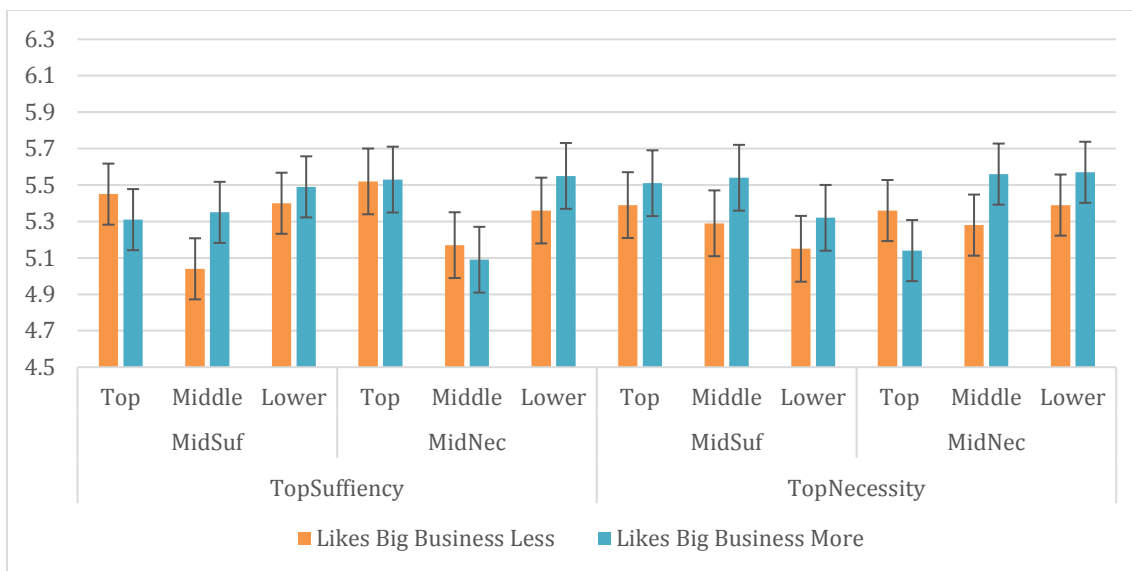


Figure 21b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had foreseeability.

21b).

This five-way interaction was further qualified by Middle Manager Choice, $\chi^2(2) = 10.59, p = .0050$. The finding that individuals high in Big Business held the lower agent more culpable than their low Big Business counterparts when the top manager's actions were necessary and the middle manager's actions were sufficient and not foreseeable, only held when the middle manager had a choice ($M = 6.03$ vs. 5.33), $p < .01$. The second significant finding (that individuals high in Big Business held the lower agent more culpable than their low Big Business counterparts when the top manager's actions were necessary and the middle manager's actions were necessary and not foreseeable) was no longer significant when Middle Manager Choice was included in the interaction.

The above four-way interaction previously summarized in Figures 20a and 20b (Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Big Business) was also qualified by Top Manager Foreseeability, five-way interaction $\chi^2(2) = 10.70, p = .0047$. A comparison between the right-hand side of Figure 20a and Figure 22a makes clear that Big Business supporters varied in their responses as a function of the Top Managers Foreseeability. Whereas Big Business supporters were generally most likely to blame the lower agent when the middle manager did not foresee the consequences of his actions (regardless of whether his actions were necessary or sufficient for lower agent's actions), this was not the case when the Top Manager was able to foresee what would happen as a consequence of his own actions, and the Middle Manager's actions were only enabling. In other words, when the top manager was able to anticipate what would happen, but the middle manager was not, though his actions set the stage for the lower agent's actions, then all three parties were held culpable at the same level. This suggests that even Big Business supporters were attentive to what top

management knows and do take it into consideration when determining how much “blame” to heap on those lower in the hierarchy.

Yet, when neither the top manager nor the middle manager did foresee the consequences of their actions, and when the middle manager’s actions compelled (i.e. were sufficient to bring about) the lower agent’s actions, then the lower agent was clearly more culpable than the top manager ($M = 5.77$ vs. 5.15), $p = .0005$, though the culpability of the middle manager fell in between the two, without being significantly different from either ($M = 5.50$; see the red box on Figure 22a). In all other cases, the pattern resembled the one previously discussed in the context of Figure 20a, right-hand side. At low levels of Big Business there were no significant differences (see Figure 22b).

For completeness, we also report the direct comparisons of estimates for individuals critical or supportive of Big Business (1 *SD* below and above the mean), see Figure 22c and 22d. As discussed before in the context of the four-way interaction



Figure 22a. Actor by Middle Manger Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – high Big Business participants.

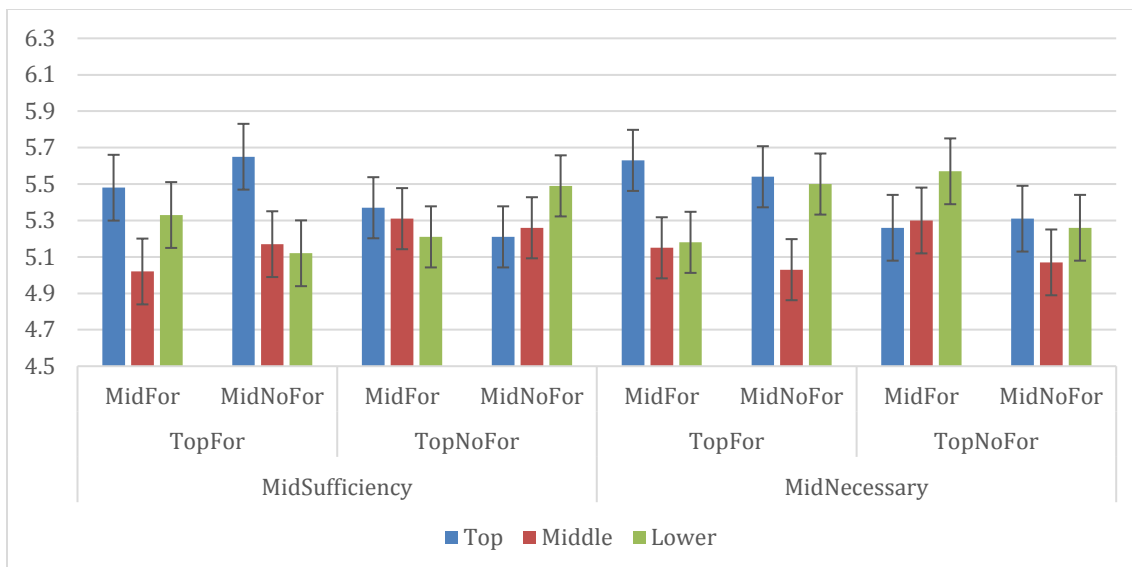


Figure 22b. Actor by Middle Manger Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – low Big Business participants.

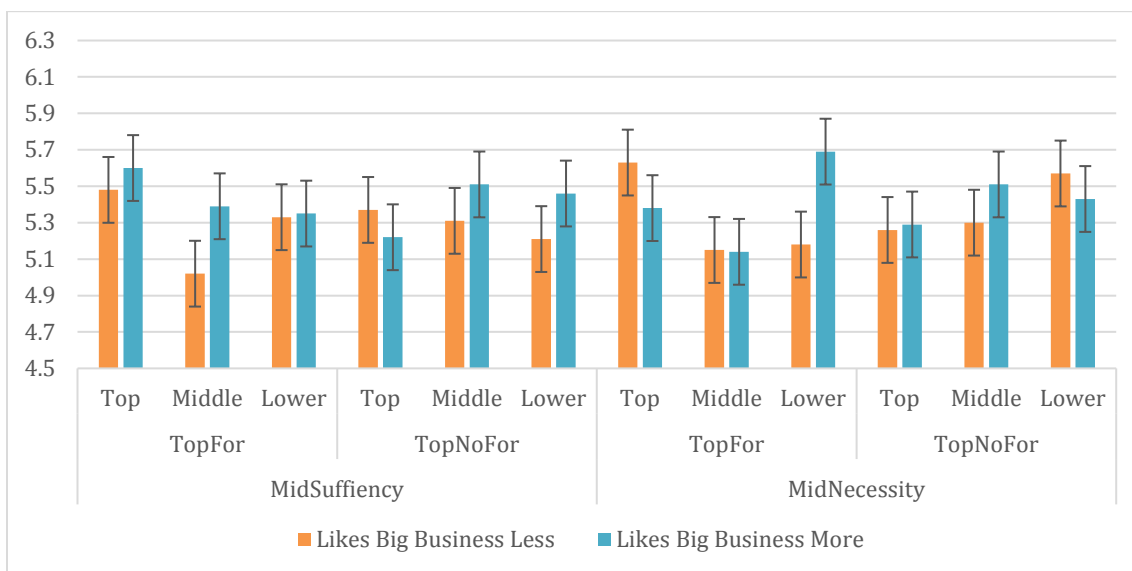


Figure 22c. Actor by Middle Manger Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had foreseeability.

represented in Figure 20b, Big Business supporters were more likely to hold especially

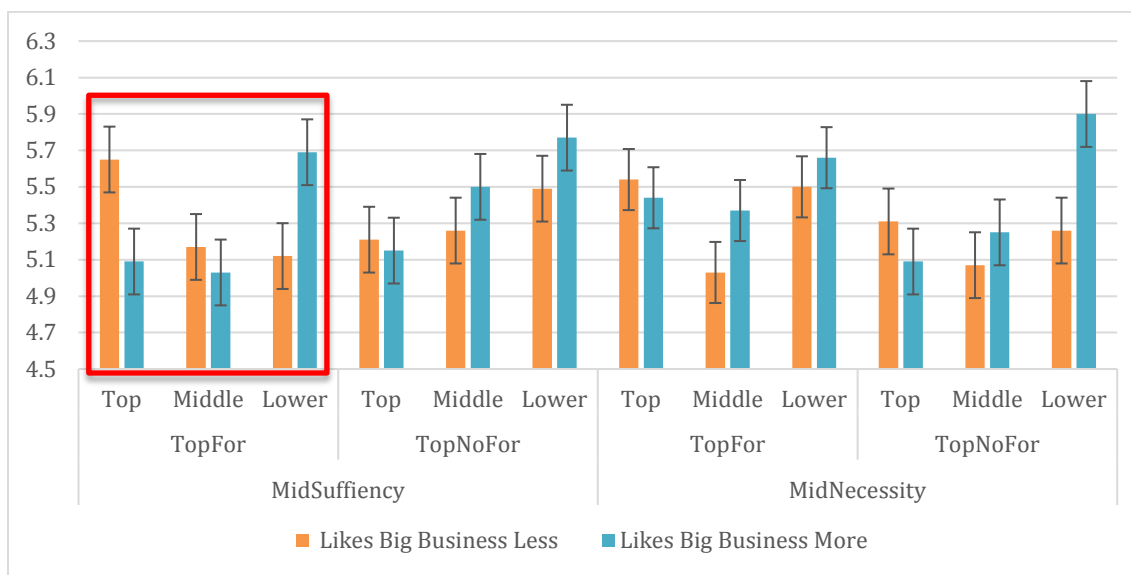


Figure 22d. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had no foreseeability.

the lower agent, i.e. the person on the ground, more culpable than their counterparts who were more skeptical of Big Business (see both Figures 22c and 22d). This particular interaction, however, provided clarification on when precisely Big Business skeptics would consider the top manager to be most culpable. Specifically, when the top manager was able to foresee what might happen, but the middle manager was unable to do so, yet his own actions determined (i.e. were sufficient for) the lower agent's course of action, then Big Business skeptics were most willing to put the culpability with the top manager (see the red box in Figure 22d). Interestingly, this was also a condition where Big Business supporters were most willing to put the culpability on the lower agent. This pattern illustrates that Big Business attitudes may have a dramatic effect on how observers might allocate culpability.

In addition to the above complex interactions, there was also a significant Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Big Business interaction, $\chi^2(2) = 11.35, p = .0034$. The complete pattern is again displayed in Figure 23a for Big Business supporters (1 *SD* above the mean) and in Figure 23b for Big Business skeptics (1 *SD* below the mean). We wish to focus the reader's attention that the fact that both Big Business supporters and Big Business skeptics responded similarly to the middle manager not having a choice in the face of the upper actor being able to foresee the consequences of his actions and his actions predetermining (i.e. being sufficient for) the middle managers' actions. On the left-hand side of both Figure 23a and Figure 23b (see the red boxes), the middle manager is thought to be much less culpable than the lower agent. That is, both types of respondents seem to recognize that the middle manager had, in fact, low agency. However, the very same respondents differed very much on the implications of this

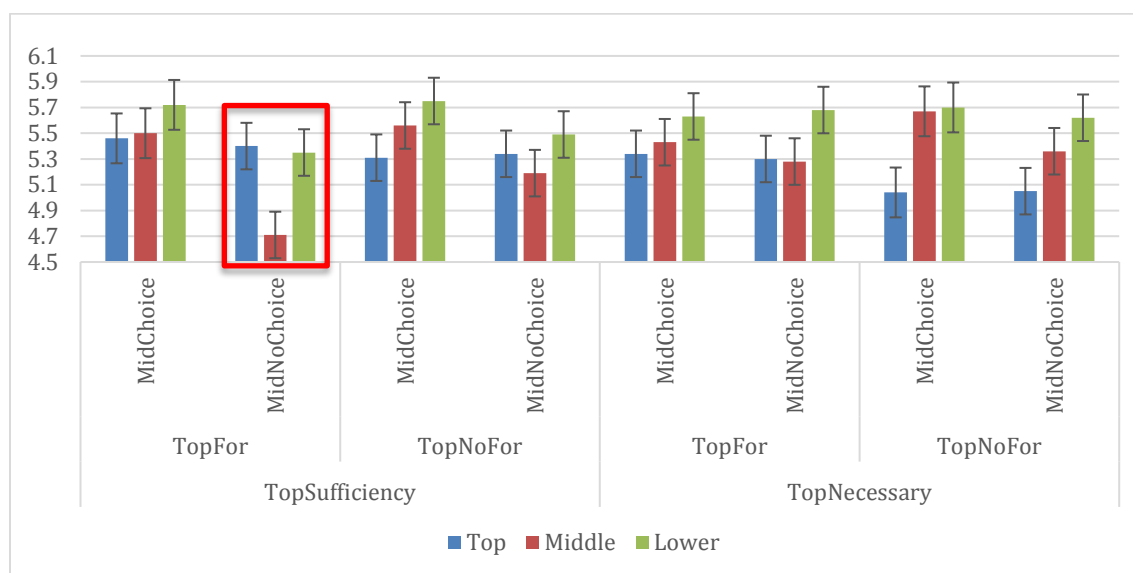


Figure 23a. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – high Big Business participants.

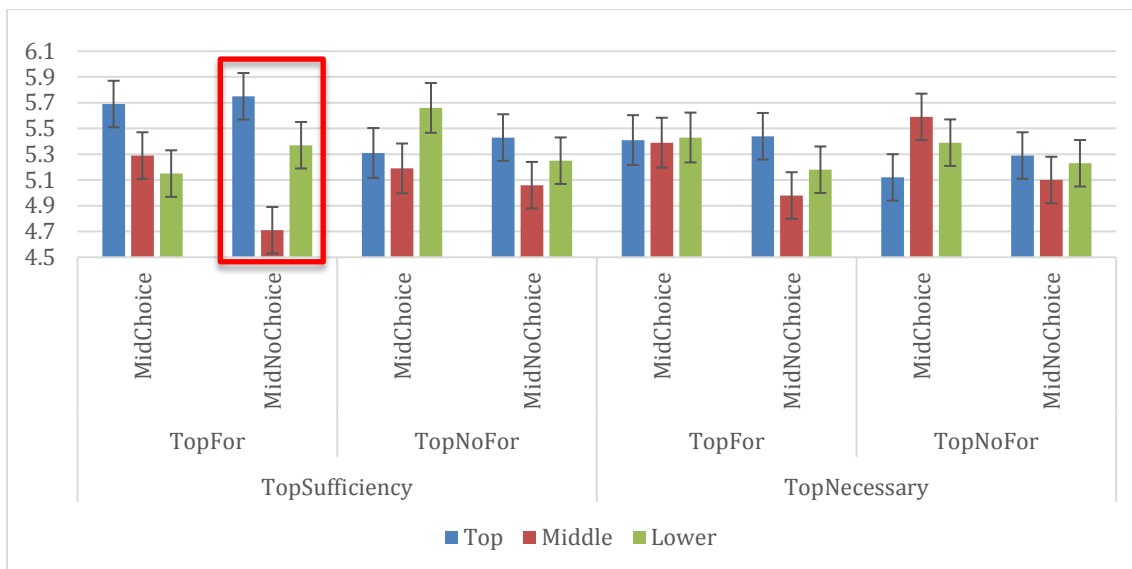


Figure 23b. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – low Big Business participants.



Figure 23c. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had a choice.

situation for the top manager. Whereas Big Business supporters thought of the top



Figure 23d. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had no choice.

manager about as culpable as the lower agent ($M = 5.40$ vs 5.35), $p > .01$, Big Business skeptics thought of him to be somewhat more culpable than the lower agent ($M = 5.75$ vs 5.37), $p = .0082$. This again reveals that pre-existing attitudes about business seem to influence participants' willingness to blame upper management.

As before, this was also apparent with regard to the culpability of the lower agent. Again, we compared estimates for Big Business supporters and Big Business skeptics (Figure 23c and 23d). Big Business supporters were more likely than their more skeptical counterparts to blame the lower agent (i.e. the person on the ground), when the top manager's actions were sufficient and he had foreseeability, but when the middle manager had a choice ($M = 5.72$ vs 5.15 , $p < .01$; see the red box in Figure 23c). This was also the case, when the top manager's actions were merely necessary and the middle manager had no choice, regardless of Top Manager Foreseeability (see the red boxes in

Figure 23d). This corroborates the previous observation that Big Business supporters seem much more willing to blame the person on the ground, who was instrumental in bringing about harm, even when his own actions may have been constrained by the organizational hierarchy.

There was also an Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business five-way interaction, $\chi^2(2) = 10.07, p = .0065$. When examining the differences between those who like big businesses more and less there were several significant differences. Several scenarios resulted in individuals who liked big businesses finding the lower agent more culpable than those who liked big businesses less (see Figures 24a and 24b). First, those who like big businesses more held the lower agent more culpable than those who like big businesses less when the top manager's actions were necessary and the middle manager

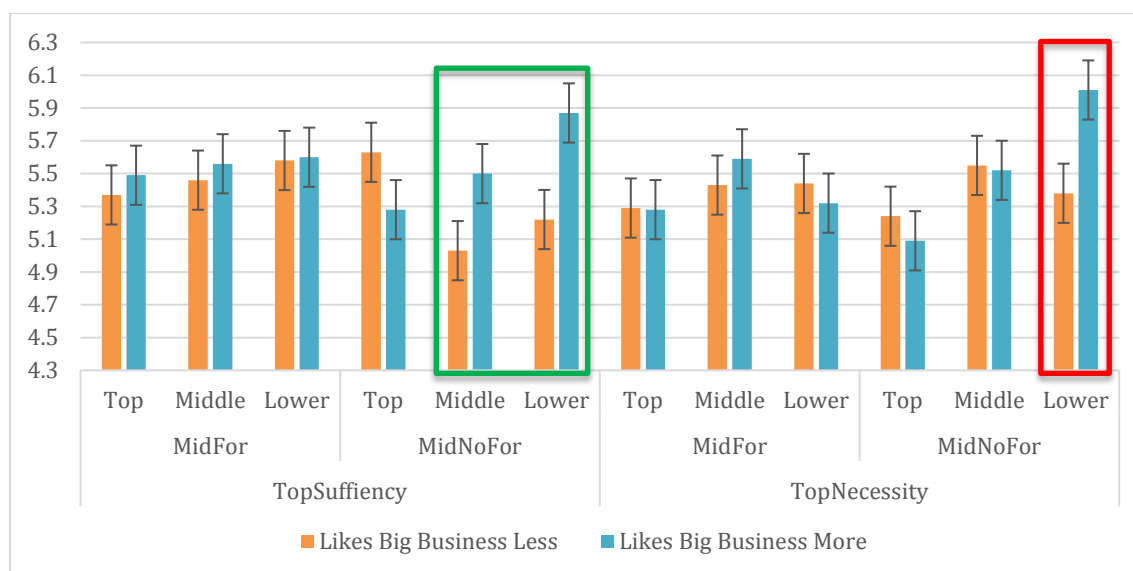


Figure 24a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had a choice.



Figure 24b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had no choice.

did not have foreseeability (regardless of Middle Manager Choice; $M_{LoChoice} = 6.01$; $M_{LoChoice} = 5.38$, $p < .01$; $M_{LoNoChoice} = 5.73$; $M_{LoNoChoice} = 5.31$, $p < .01$, respectively; see the red boxes in Figures 24a and 24b). Second, individuals who like big businesses more rated the lower agent to be more culpable than those liking them less when the top manager's actions were necessary and the middle manager had foreseeability ($M = 5.57$ vs. $M = 5.51$), $p < .01$ (see the green box in Figure 24b). Third, those who like big businesses held both the middle manager and the lower agent more culpable than their counterparts who liked big businesses less when the top manager's actions were sufficient and the middle manager did not have foreseeability but did have a choice ($M_{Middle} = 5.50$ vs. $M_{Middle} = 5.03$, $p < .01$; $M_{Lower} = 5.87$ vs. $M_{Lower} = 5.22$, $p < .01$, respectively; see the green box in Figure 24a).

This five-way interaction was further qualified by either Top Manager

Foreseeability, six-way interaction $\chi^2(2) = 9.96, p = .0069$. We found that the five-way result that individuals high in Big Business held the lower agent more culpable than those low in Big Business when the top manager's actions were necessary and the middle manager's actions were not foreseeable (regardless of Middle Manager Choice), was impacted by Top Manager Foreseeability. When the middle manager had no choice, the finding still held only when the top manager had no foreseeability ($M = 5.92$ vs. 5.32), $p < .01$. When the middle manager did have a choice, the difference was still significant regardless of Top Manager Foreseeability (foreseeable: $M = 5.93$ vs. 5.35 , $p < .01$; not foreseeable: $M = 6.09$ vs. 5.42 , $p < .01$). The significant finding for the five-way interaction that high Big Business individuals held the lower agent more culpable than those low in Big Business when the top manager's actions were necessary and the middle manager had foreseeability and no choice, was found to hold only when the top manager had foreseeability ($M = 5.82$ vs 5.06), $p < .01$. Finally, the significant finding from the five-way interaction that those high in Big Business held the middle manager and lower agent more culpable than those low in Big Business when the top manager's actions were sufficient and the middle manager did not have foreseeability but did have a choice, was impacted by Top Manager Foreseeability. For the lower agent, it was only when the top manager had foreseeability that the difference was still significant ($M = 5.92$ vs 4.93), $p < .01$. For the middle manager, all significant differences disappeared when Top Manager Foreseeability was added to the interaction.

We also obtained an Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business by Top Manager Choice six-way interaction, $\chi^2(2) = 14.63, p = .0007$. The five-way result that individuals

high in Big Business held the lower agent more culpable than those low in Big Business when the top manager's actions were necessary and the middle manager's actions were not foreseeable (regardless of Middle Manager Choice), was impacted by Top Manager Choice. When the middle manager had no choice, the finding still held only when the top manager had no choice ($M = 5.72$ vs. 5.10), $p < .01$. When the middle manager did have a choice, the difference was still significant when the top manager had a choice ($M = 6.00$ vs. 5.34), $p < .01$. Interestingly, when the top manager did not have a choice, the finding was still significant, but the pattern was reversed (with those low in Big Business holding the lower agent more culpable than those high in Big Business, $M = 6.02$ vs. 5.42), $p < .01$. The significant finding for the five-way interaction that high Big Business individuals held the lower agent more culpable than those low in Big Business when the top manager's actions were necessary and the middle manager had foreseeability and no

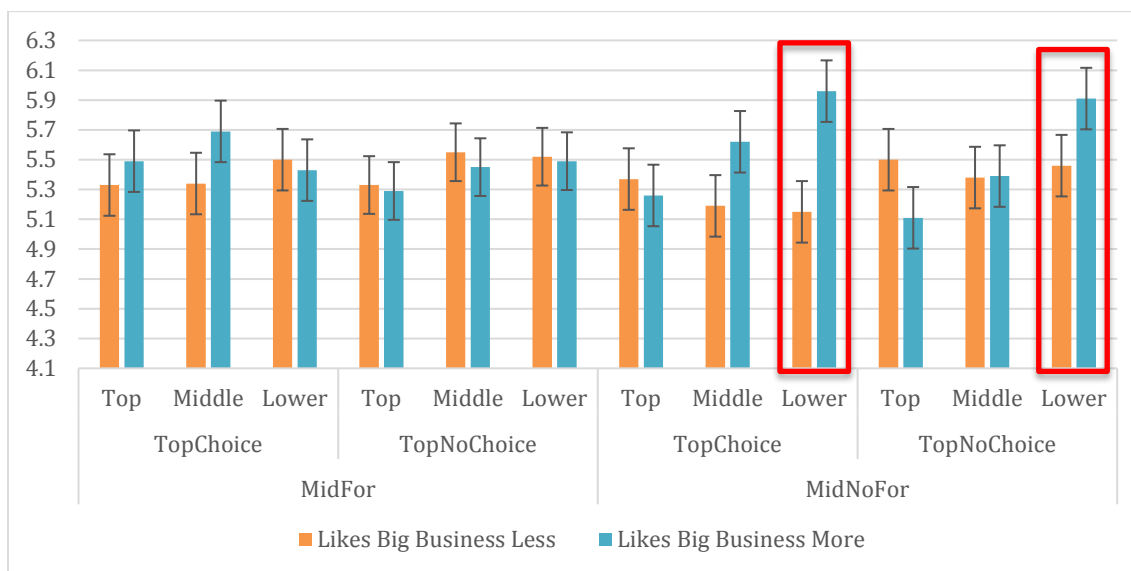


Figure 25a. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had a choice.



Figure 25b. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining high and low Big Business individuals in the conditions where the Middle Manager had no choice.

choice, was found to hold only when the top manager had no choice ($M = 5.55$ vs 4.86), $p < .01$. Finally, the finding from the five-way interaction that those high in Big Business held the middle manager and lower agent more culpable than those low in Big Business when the top manager's actions were sufficient and the middle manager did not have foreseeability but did have a choice, was significant only when the top manager had a choice (middle manager: $M = 5.64$ vs 4.91 , $p < .01$; lower agent: $M = 5.93$ vs 4.95 , $p < .01$).

There was also a significant Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business five-way interaction, $\chi^2(2) = 10.46$, $p = .0054$. When comparing individuals low and high in Big Business, there were several conditions that resulted significant differences. First, when the middle manager had a choice but did not have foreseeability (regardless of Top Manager Choice

– although the difference was more pronounced when the top manager had a choice), individuals high in Big Business held the lower agent more culpable ($M_{UpChoice} = 5.96$; $M_{UpNoChoice} = 5.91$) than those low in Big Business ($M_{UpChoice} = 5.15$; $M_{UpNoChoice} = 5.46$, $ps < .01$; see the red boxes in Figure 25a). Second, when the middle manager had foreseeability and neither the upper nor middle managers had a choice, individuals high in Big Business held the middle manager ($M = 5.04$) and lower agent ($M = 5.52$) more culpable than their low Big Business counterparts ($M = 4.55$; $M = 5.07$, $ps < .01$, see the red box in Figure 25b). Third, when the middle manager did not have foreseeability and neither the upper nor middle managers had a choice, individuals low in Big Business held the top manager more culpable ($M = 5.55$) than those high in Big Business ($M = 5.08$, $p < .01$; see the green box in Figure 25b).

This five-way interaction was further qualified by Middle Manager Sufficiency/Necessity, $\chi^2(2) = 9.34$, $p = .0094$. When examining the inclusion of Middle Manager Sufficiency/Necessity, we found that five-way result that individuals high in Big Business held the lower agent more culpable than those low in Big Business when the middle manager's actions were not foreseeable and he did not have a choice (regardless of Top Manager Choice), was impacted by Middle Manager Sufficiency/Necessity. When the middle manager had a choice, the finding was still significant regardless of Middle Manager Sufficiency/Necessity (Sufficient: $M = 6.02$ vs. 5.09 , $p < .01$; Necessary: $M = 5.90$ vs. 5.20 , $p < .01$). When the middle manager did not have a choice, the significant difference disappeared when Middle Manager Sufficiency/ Necessity was included in the interaction. The significant finding for the five-way interaction that low Big Business individuals held the top manager more culpable than those high in Big Business when the

middle manager's actions were not foreseeable and neither the upper nor middle managers had a choice, was found to hold only when the middle manager's actions were sufficient ($M = 5.62$ vs 4.98), $p < .01$. Finally, the significant finding from the five-way interaction that those high in Big Business held the middle manager and lower agent more culpable than those low in Big Business when the middle manager had foreseeability and neither the top manager nor middle manager had a choice, was impacted by Middle Manager Sufficiency/Necessity. When Middle Manager Sufficiency/Necessity was added to the interaction, all significant differences for the middle manager and lower agent vanished. For a more detailed explanation of these higher-order five- and six-way interactions, see Appendix F.

There were four significant interactions that did not include Actor and did not yield any significant differences when point estimates for those high and low in Big Business (1 *SD* above and below the mean) were examined; thus they will not be discussed.⁵

Summary. In general, these results suggest that individuals low in Big Business might have put more weight on the actions of the individual at the beginning of the chain, while individuals high in Big Business might have put more weight on the actions of the person in the middle of the chain (and whose actions directly impacted the lower agent).

⁵ Interactions not involving Actor include: Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business, $\chi^2(2) = 7.58$, $p = .0059$; Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 7.32$, $p = .0068$; Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 7.18$, $p = .0074$; Top Manager Sufficiency/ Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 9.03$, $p = .0026$.

The middle manager tended to be the person held least culpable, while the lower agent tended to be held most culpable. Middle agent choice frequently exaggerated the differences between individuals low and high in Big Business. When the middle manager did not have a choice, those high in Big Business tended to find the lower agent more culpable than those low in Big Business.

Chapter 8: Discussion

Instances of corporate wrongdoing are prevalent in today's society. Often, when we learn details about what led up to the wrongdoing, we learn that it was not just one individual who acted in an improper way. Rather, typically there was a series of events that contributed to the wrongdoing, and the outcome. These events are frequently actions and decisions made by individuals at different levels within an organizational hierarchy. The example mentioned earlier of the Wells Fargo banking fraud was a perfect example of a chain of events leading to a negative outcome. There was pressure exerted on employees throughout multiple levels of the organization which resulted in some individuals who worked at the bank branch level to fraudulently open accounts.

When confronted with a scenario such as this, we are often left wondering who to hold accountable so that this wrongdoing does not go unpunished and to also deter future similar actions from occurring. There are several different ways in which individuals may react to these situations. Some people may want to only hold the individuals who actually did the wrongdoing responsible and not consider the actions of the other workers who might have impacted them. Others may want to hold those at the top of the organization responsible for setting up an organizational culture that allowed this wrongdoing to occur. Others may see all the people involved as being somewhat responsible for the outcome, and thus they should all face some form of punishment.

There are several different factors that may influence how individuals decide who they want to hold accountable for a wrongdoing that occurred within a hierarchical causal chain. The goal of the present investigation was to examine the overarching question pertaining to the parsing out of culpability between individuals within a causal chain and

what factors may influence this process. To do this, we examined four different scenarios in which there were three individuals within a hierarchical causal chain that resulted in a wrongdoing. We manipulated whether or not the top two actors required or merely enabled the next actor in the chain to act, whether the top two actors had foreseeability of the outcome of their decision, and whether or not the top two actors had a choice in the decisions they made.

Very broadly speaking, we found that individuals tend to hold the person at the end of the causal chain (i.e., the one whose actions were most instrumental for the wrongdoing to occur) most culpable. The findings for the two actors higher in the chain (i.e., the one who initiated the chain and the person in the middle of the chain) were more varied. Culpability ratings for these two actors were most often impacted by their choice and foreseeability. Namely, when an actor had a choice and foreseeability he was held more culpable, but this was also impacted by individual differences. The pressure exerted on the next actor in the chain was found to be a less impactful influence on culpability for the pressuring agent. In the following sections, we discuss our findings in detail and examine what they tell us about how causal attributions are made in these types of complex relationships.

What our Results tell us about our Hypotheses and Research Questions

In this research we tested a number of different hypotheses and asked several research questions. Below we address how these fared in light of our findings and review pertinent results in detail.

The role of agency and foreseeability. Our first two hypotheses were based on the research by Hilton and colleagues (2016), who found that when an actor had a choice

and foreseeability of the outcome, he was deemed more causally responsible and blameworthy.⁶ From this, we proposed:

- Hypothesis 1: When there is human action and the actor has foreseeability of the outcome, that actor is deemed more responsible, blameworthy, and liable compared to when there is no foreseeability of the outcome.
- Hypothesis 2: When the actor has a choice in making a decision that leads to an undesirable outcome, he is held more responsible, blameworthy, and liable compared to when he does not have any alternatives.

Both hypotheses were supported. In general, when an actor had a choice and had foreseeability, he was held more culpable. A fairly consistent finding was that the middle manager was not held as culpable if he did not have a choice. The influence of personal agency on culpability was stronger than the influences that others put on them. In other words, an individual's actions were given more weight in decisions about culpability than how the actions of others in the causal chain might have impacted them. In spite of this broader pattern, the support for these hypotheses was often qualified by other circumstances discussed in more detail below.

Preconditions of agency: Sufficiency and Necessity. Our next hypothesis was based on the work of McClure and colleagues (2007). These results suggested that when an actor made a decision that was sufficient to bring about a particular outcome, he was held more responsible than when he made a decision that was merely necessary for bringing about the same outcome. From this, we proposed:

- Hypothesis 3: When the actor makes a decision that is sufficient to bring about a particular (undesirable) outcome he is seen as more responsible than when he makes a decision that is seen as necessary for bringing about the same outcome.

⁶ Although results were reported for culpability, a dimension that is composed of responsibility, blame, and liability attributions, note that our hypotheses named each attribution separately. Below, we will provide a discussion of the three separate types of attributions relative to culpability.

In general, we found partial support for this hypothesis. When an actor required the next actor in the causal chain to act, he tended to be held more culpable compared to when he merely enabled the next actor to engage in an action. As was the case with most findings in this study, however, this pattern did not emerge consistently, as other factors moderated this relationship. In some instances, the expected relationship occurred only when individual differences and the decisions of other actors were considered as well. A case in point is the interaction involving Top Manager Sufficiency/Necessity, Middle Manager Sufficiency/Necessity, and Feelings toward Big Businesses. By itself, whether the middle manager only enabled or required the lower agent to act had no consistent implications for whether the middle manager was considered more or less culpable. However, Middle Manager Sufficiency/Necessity did have the expected effect under the condition of Top Manager Sufficiency. When the top manager's actions were sufficient, that is, he required the middle manager to take an action, but the middle manager's actions were merely necessary, that is the middle manager enabled the lower agent, then the middle manager was found to be significantly less culpable compared to when the middle manager required the lower agent to act. In other words, evidence in support of Hypothesis 3 did emerge, but continued to be embedded in the broader context of the causal chain. This implied that a manager's sufficient action either resulted in greater attributed culpability or not. The reverse, that is, that a manager's sufficient action would result in a lower attribution of culpability compared to the same manager's necessary action was extremely rare. In this sense, the preponderance of evidence either supported Hypothesis 3 or did not support it (via the absence of any difference); yet, contradictory

evidence was arguably negligible. A further complicating factor, referenced above, was that individual differences often moderated these patterns, such as whether individuals liked big businesses or not.

The current study used scenarios that differed from the opportunity chains discussed by in prior research (Hart & Honoré, 1985; McClure et al., 2003), which focused on the first actor enabling the second actor and then the second actor causing the outcome. Also, Hart and colleagues' chains only included two actors, whereas ours had three. The addition of a third actor and the varying of the sufficient and necessary conditions resulted in outcomes that differed from prior research. As mentioned above, an actor's decisions being sufficient or necessary for a second actor did not consistently impact the culpability attributed to the first actor. It is also important to note that Hart and Honoré's model of explanation would be most suitable to the last two actors in the current study's causal chain of three actors. Yet, the current study, by manipulating the sufficiency/necessity of their actions, focused on the actions of the first two actors in the causal chain (with the understanding that the final actor would not vary in his behavior).

In our review of the literature, we noted that prior research examined the impact of necessary or sufficient actions taken by a person on attributions toward that same person. Yet, the existing literature had not fully explored the relationships between the actions of an individual within a causal chain and the impact those actions may have on a different person within the chain. From this, we posed the following question:

Research Question 1: How does the sufficiency/necessity decision of each actor impact overall ratings of responsibility, blame, and liability for the other actors within the chain?

There was partial support for the notion that especially the middle manager was

held less culpable when his own actions could be understood as being conditioned by the actor higher up in the hierarchy. However, this evidence was highly dependent on context. There was sparse evidence that the sufficient/necessary actions of the middle manager had a consistent impact on the lower agent. It appeared that participants were somewhat likely to consider the impact of a preceding actor's actions on the middle actor in the causal chain, but when it came to the actor that actually conducted the wrongdoing they were less likely to consider preceding actor's actions. In other words, when assessing culpability of the individual closest to the wrongdoing (i.e., the lower agent), the actions of individuals earlier in the causal chain, which may have predetermined his actions, tended to be less important than they were for individuals earlier in the chain (i.e., the middle manager). The primary factor that he was the one who actually committed the wrongdoing (or was closest to it) was enough for individuals to fairly consistently hold him the most culpable.

The connections between agency and preconditions of agency. A critical topic of this work focused on the connections and intersections between all of the variables included in the current study. Prior studies (e.g., Hilton et al., 2016; McClure et al., 2003) have examined these concepts separately, but they have not investigated the relationships between all of these variables. From this, we proposed:

Research Question 2: How does the combination of necessity, sufficiency, foreseeability, and choice impact attributions of responsibility, blame, and liability?

Results suggested that the interplay between these variables can result in varying attributions of culpability. To generalize across a complex set of findings, these differences were primarily a result of the interaction between choice and foreseeability

and less so a result of actor sufficiency or necessity. In other words, the agentic elements mattered more when arriving at causal attributions than the mechanics of the causal relationship (in terms of preceding actions being either necessary or sufficient for subsequent ones). Choice and foreseeability had a bigger impact on culpability than sufficiency/necessity. Put differently, the logical connections between subsequent actions, i.e. the preconditions of agency, were less important than personal agency itself; it was all about the actions of the individual.

In a similar vein, the impact of the manipulated agency variables was greatest when they related specifically to the actions of the individual doing them. For example, Middle Manager Choice and Middle Manager Foreseeability had a greater impact on the perceived culpability of the middle manager than it did on the other actors. One would expect that the middle manager having foreseeability and a choice should be exculpatory for the lower agent; however, this was not normally found. Often, regardless of the top and middle managers' knowledge/actions, the lower agent was held highly culpable.

In general, for the middle manager there tended to be the biggest "swings" in culpability. The lower agent was fairly consistently held the most culpable, followed by the person who started the causal chain, the top manager. While there were variations in culpability for these two agents depending on the condition, the changes in the level of culpability did not vary as much as they did for the middle manager. This indicated that for the person who was in the middle of a causal chain, the other contextual factors may impact their culpability more than the people at the beginning or end of the chain.

The role of proximity to the outcome. Our next hypothesis came from the work of Kanekar and Miranda (1998). They found that, in general, those closest to a

wrongdoing tend to be blamed the most, whereas the further away from the wrongdoing one gets the blame was less consistent and was more influenced by external factors. From this, we proposed:

Hypothesis 4: The more proximal cause in a causal chain will be seen as more causally responsible, blameworthy, and liable compared to the more distal cause. In the present study, this means that the lower agent should generally be held more culpable than the top and middle managers.

We found good support for this hypothesis. The lower agent was fairly consistently held the most culpable, followed by the person who started the causal chain, the top manager. Similar to Kanekar and Miranda (1998), the determination of culpability (especially for the middle manager) was greatly influenced by situational factors.

Whereas the lower agent was quite consistently held most culpable, the culpability of the top and middle managers varied as a function of the experimental condition. Prior researchers (Hilton et al., 2016; McClure et al., 2007) have noted that the first human action to which an event can be traced back is what people tend to note as the cause of the event. In these situations, people do not tend to search for more potential factors/causes beyond that initial one. This might suggest that the lower agent's actions may not be traced back to the middle manager, and the middle manager's actions may not be traced back to the top manager. Our results somewhat support this finding. The lower agent was considered to be the most culpable actor; yet, under certain circumstances (e.g., when the participant was high in Attributional Complexity) participants were clearly considering all of the potential factors within the total causal chain. This finding was also interesting in terms of what it told us about how individuals process information about the elements of the causal chain. Our results were consistent with the idea that

individuals start with the negative event and work back up the chain toward the most distal actor when arriving at determinations of culpability.

The moderating role of attributional complexity. Our next hypothesis examined the impact of attributional complexity on attributions of culpability within a causal chain. Prior research (e.g., Fletcher et al., 1992; Lassiter et al., 2005; Pope & Meyer, 1999) indicated that attributionally complex persons were more likely to consider a broader range of causal factors and were less susceptible to bias. From this, we proposed:

Hypothesis 5: Individuals high in AC are more likely than those low in AC to take the specific contextual forces into consideration when making attributions concerning responsibility and blame.

The hypothesis that individuals high in AC would be more likely to take contextual factors into consideration when making attributions of culpability was strongly supported. Consistently, we found that for those low in AC there were no significant differences between culpability for the different actors whereas there were differences for their high AC counterparts. Individuals high and low in AC were acting as expected. High AC persons were thinking deeply about the different circumstances of the situations and how all the actors fit together, and low AC persons were not providing much consideration of the specific factors impacting each individual actor's situations. Low AC individuals' results were more consistent across conditions (presumably as a result of them not strongly considering the impact of the different actor's knowledge/actions), whereas high AC individuals considered multiple factors at the same time and adjusted their attributions of culpability appropriately based on the actions of all the actors involved.

The creators of the AC scale contend that it is a combination of motivation and ability that allows for individuals to be high in AC (Fletcher et al., 1986). Fast, Reimer, and Funder (2008) found that being high in AC did not equate to higher test scores/academic achievement, but it was related to being more skilled socially and having better social judgment. This suggests that the cognitive ability (i.e., “smarts”) to think deeply about a situation might not be as important as the situational capability (e.g., cognitive load). If people are in situations where they cannot fully focus on the task at hand as a result of other stimuli, they may not have the ability to fully examine the complex relationships between different situational factors related to the scenario. Fast and colleagues’ findings also suggest that the relationship between AC and social reasoning is greater than that of AC and intelligence. In the current study, having a more nuanced understanding social relationships and interactions (as those high in AC do) may be a critical component to being able to parse out culpability in complex causal chains.

The moderating role of independence and interdependence. Our next hypothesis was based on the work of Kanekar and Miranda (1998) and Sanders and colleagues (1996), which suggested that high interdependent individuals should be more attuned to understanding others’ behavior in their context and therefore place more culpability with the distal actors in the chain, whereas high independent individuals should primarily see the most proximal actor as the cause of the negative outcome. From this, we proposed:

Hypothesis 6: High interdependent individuals will assign responsibility, blame, and liability to the distal and proximal actor in the causal chain, whereas high independent individuals will assign responsibility, blame, and liability primarily to the proximal actor.

Whereas the wording of the hypothesis may make it appear as though there is one

underlying dimension ranging from high interdependence to high independence, prior research (e.g., Taras et al., 2013) has confirmed that these are two separate dimensions and they were examined as such. Contrary to previous assumptions, in the current study, high interdependence individuals did not assess culpability in a way that separated different “shares” of culpability between different actors. Rather, because they viewed the behaviors among agents as interrelated, they were less likely to make some of the finer distinctions between actors based on their knowledge and actions. Arguably, they view the actors as working within a larger set of circumstances, which resulted in holding the middle manager more culpable in certain situations. In other words, instead of simply transferring culpability from the proximal actor to the distal actor, individuals high in interdependence tended to hold all of the actors more culpable.

Individuals low in interdependence and those high in independence generated similar results that were as expected based on previous research. In general, both kinds of individuals focused a great deal on agency and proximity. That is, they tended to hold the lower agent most culpable, but the agency of the preceding actors in the chain were also crucial. In contrast to high-independence participants focusing primarily on the lower agent, low-independence individuals took the actions of those other actors into account, and they seemed to be most attentive to the earliest actor in the chain. In other words, individuals low in independence appeared to put most of their emphasis on the top manager who initiated the causal chain. When the top manager had a choice, there was a slight decrease in culpability for those below him in the chain, but in general most actors were held fairly culpable. Conversely, when the top manager did not have a choice, there was much greater variability in the culpability ratings for all actors.

Individual Differences in Social Beliefs

Our final research question examined the impact of individual difference variables (i.e., political ideology, feelings toward small businesses, feelings toward big businesses, and CJLCA) for which we were not able to generate strong hypotheses, but for which the literature does allow some predictions. First, we will discuss our predictions related to political ideology and businesses, followed by those for CJLCA. Because conservatives tend to be more pro-business (e.g., Heinze et al., 2014), we anticipated that they may be more inclined, compared to their liberal counterparts, to attribute culpability to individual actors rather than businesses. In other words, an actor who is thought to be a prime representative of the business as a whole (e.g., the top manager) should be held less culpable by conservatives, whereas an actor who is less of a representative of the business (e.g., the lower agent) should be held more culpable. Similarly, individuals who like small or big businesses more should be inclined to find them less culpable than those who like them less.

With regard to Civil Juror Litigation Crisis Attitudes, it was possible that litigation attitudes shape people's willingness to consider multiple actors as potentially liable for an outcome. If true, then we might also observe that individuals who believe there is a litigation crisis primarily want to hold those actors liable who are closest to the wrongdoing (i.e., have the most direct connection to the wrongdoing). This could mean that those who believed there was a litigation crisis may prefer a simpler "solution" when deciding complex cases. In our current study, this would mean that those who believed there was a litigation crisis should have been more likely to hold the lower agent alone culpable and those who did not believe there was a crisis should have been more likely to

hold actors earlier in the causal chain culpable (in addition to the lower agent). From this, we proposed:

Research Question 3: How do individual difference measures (i.e., civil juror litigation crisis attitudes, political ideology, feelings toward small and big businesses) related to decision making impact attributions of responsibility, blame, and liability?

Our findings indicated that conservatives tended to focus most of their attributions of culpability on the lower agent, whereas liberals' attributions of culpability varied much more based on the specific circumstances outlined in the scenarios. These results suggested that conservatives primarily focused on proximity, as even when the lower agent's actions were predetermined by the middle manager (an action that should have resulted in decreased culpability) he was still held more culpable. When conservatives did examine the impact of individuals earlier in the causal chain, they tended to only go back to the actions of the middle manager. Liberals, on the other hand, would examine the impact of individuals all the way from the beginning of the causal chain when assessing lower agent culpability. These differences resulted in conservatives holding the top manager less culpable than liberals and holding the lower agent more culpable than liberals.

Although our predictions related to the impact of political ideology on attributions were initially focused on the relationship between political orientation and feelings towards businesses, we found that there were differences between how these factors impacted attributions. In other words, there were inconsistent results across the models that included political ideology, feelings toward small businesses, and feelings toward big businesses. The differential impacts of these three variables indicate that political ideology's impact on attributions is more than just how conservative or liberal individuals

tend to feel about businesses. There are other elements of political ideology impacting these decisions. One of these elements may be related to the ideology of personal responsibility.

Prior research (e.g., Carroll, Perkowitz, Lurigio, & Weaver, 1987; Schlenker, Chambers, & Le, 2012) has shown that conservatives have an ideology of personal responsibility. They tend to hold beliefs that people have greater personal agency in terms of personal control and responsibility. Specifically, conservatives (as opposed to liberals) see people as having greater self-efficacy and control over their outcomes. These findings align with the results of the current study. Conservatives tended to place more weight on the person closest to the wrongdoing, focusing on the personal agency of that actor, while de-emphasizing the external influences impacting other actor's actions. Liberals, on the other hand, tended to focus more on the situational factors that may be impacting the actions of the individual actors.

In general, our results concerning individual differences show a theme emerging that individual differences matter for (a) "how far back" participants are willing to go in terms of considering factors that affect the actions (and the culpability) of people later in the chain, and (b) which particular factors they are willing to consider. For instance, it is plausible that attributional complexity impacts primarily the number of factors that people are willing to consider, as well as the "depth" of their reasoning, in relation to going far back in the causal chain (or not). Yet, political ideology, via the differential impact on individual responsibility compared to contextual influences may influence not only "how far back" in the analysis of circumstances that a person is willing to go, but also the specific kinds of factors they are weighing more heavily in their attributions

(with “agency” factors looming especially high with regard to individual responsibility). This could explain why the pattern of results for political ideology is somewhat more complex than those pertaining to attributional complexity.

When examining the impact of feelings toward small and big businesses on attributions of culpability, there were several interesting findings. The effects of political ideology and preferring business were not redundant with one another, even though there was a substantial correlation between political ideology and especially preference for Big Business. Also, even with the expected associations between preference for Big Business and Small Business, these two moderator variables yielded distinct effects.

In general, our findings suggest that individuals who liked Big Business less emphasized the actions of the individual at the beginning of the chain, whereas individuals who liked Big Business more emphasized the actions of the people in the middle and end of the chain. This was consistent with the notion that, if one dislikes big businesses, one would hold the person most likely to represent the business (i.e., the top manager) more culpable. Similarly, if one likes big businesses, one would hold a person in a lower level of power within the company more culpable.

When people express that they like “big business,” it suggests that people are supportive of the top-level management of large companies. In other words, this kind of preference seems to reflect participants being partial toward one type of actor in the chain over another. With few exceptions, individuals who like big businesses more held the actor at the end of the causal chain most culpable, and individuals who like big businesses less held the actor at the beginning of the chain most culpable. This implies that preferences for Big Business might be a qualitatively different moderator variable

than attributional complexity and political orientation. Specifically, feelings toward big businesses appear to impact which actors individuals are willing to hold culpable, largely regardless of the experimental manipulations. Attributional complexity appears to influence how much a person differentiates between the culpability for actors within a causal chain based on the specific factors. By contrast, political ideology appears to qualify how far back a person is willing to go in a causal chain and which factors they emphasize when arriving at causal attributions. Although preference for Big Business and political ideology have the highest correlation in Table 2, a closer examination of the results indicate that these individual difference variables are working in distinct ways.

One of the more interesting findings was that when individuals liked small businesses, they were often more critical of the person closest to the wrongdoing compared to those who liked small businesses less. In our scenarios, we did not have actors who were explicitly stated to be small businesses – we merely described the lower agent as either a vendor working for a large corporation or as a low-level person within the company. The size of the vendor company was not specified, so it is possible that the participants might have assumed it was a smaller company (at least smaller than the larger corporation for which the top two actors worked), but we did not measure this.

If one were to liken the lower agent to a “small business”, it is clear that individuals who liked small businesses more were *not* partial toward them. Often, they held the lower actor more culpable than those who liked small businesses less. If they were equating the lower actor to being more like a small business, it may be that they were holding them more culpable because they hold small businesses in high esteem and were more critical of small businesses that act in an improper manner that would result in

them giving small businesses a “bad name”.

The pattern of people who like small businesses also holding the lower actor more culpable was similar to the pattern for people who liked big businesses; yet, there were clear differences between the two. Individuals who like big businesses more showed a proclivity to hold the lower agent (and occasionally the middle manager) most culpable, while almost never holding the individual most associated with the company (i.e., the top manager) most culpable. Individuals who like small businesses more, however, do appear to consider both the top and middle managers culpable. These results show the impact of ideological differences, whereby those who favor big businesses consistently do not hold the top management culpable while those who favor small businesses do, on occasion, hold them culpable. Although it is possible for an individual to like both big and small businesses, it appears that liking small businesses does not preclude individuals holding big business figureheads culpable. It is also important to note that our “small business” actor was also always the actor closest to the wrongdoing; hence, we could not parse out what might have been small business effects versus what might have been proximity effects.

In regard to CJLCA, our findings indicated that individuals high in CJLCA primarily tended to hold the lower agent culpable, whereas individuals low in CJLCA tended to hold all of the different actors culpable. This was consistent with prior research (e.g., Greene et al., 1991; Hans & Lofquist, 1992). Those who thought that there was a litigation crisis and that the country was becoming too litigious, should be more inclined to hold one actor responsible for the wrongdoing, and that actor should be the person who actually committed the wrongdoing. Conversely, those who did not think that there was

too much litigation should be inclined to take a broader perspective of the overall circumstances in which the individual actors are operating, resulting in culpability being distributed amongst the different actors based on their actions. In other words, people critical of civil litigation wanted to only charge those people whom they believe were absolutely critical to the wrongdoing, whereas people who were not critical of civil litigation had no problem charging multiple people.

In terms of practical applications, these results can help attorneys determine which potential jurors they may want to include on their juries. For example, if an attorney is looking to charge the person who initiated the causal chain, jurors who are high in CJLCA would not be the ideal juror because they would primarily want to hold the individual at the end of the chain culpable, not the person at the beginning. This same high CJLCA juror, however, would be the ideal juror for the attorney representing the initiating actor, as they would tend to find that actor less culpable.

What our Results tell us about Reasoning and Causal Chains

Prior literature in the area of causal chaining has been somewhat limited in terms of the types of chains examined (e.g., Hilton et al., 2016; McClure et al., 2003). Often these chains only examined the actions of one human actor, or when they did examine multiple actors, it was with the intention of primarily examining the actor's awareness of the situation (Hilton, et al., 2016). While these endeavors were useful and provide insight into the mechanisms of causal attributions within a chain, the scenarios they examined were often fairly basic and were not representative of real-life complex situations. Thus, one of the main goals of the current study was to examine how attributions of culpability were impacted by having the actors within a complex chain. There have also been

theoretical investigations that have examined things such as cascade failures for cockpit crews (e.g., Orasanu, 1994). Although these areas are related to the current aims, research in these areas is primarily focused on elements other than attributions of culpability within a hierarchical organization, and thus do not provide much insight into the current endeavors.

Kanekar and Miranda's (1998) findings implied that in our scenarios, when the top manager required the middle manager to act and the middle manager required the lower agent to act, the top manager should have been held most culpable. Conversely, when each of the managers merely enabled the actor below them to act, then the lower agent should have been held most culpable. We did not, however, find this pattern when we examined the impact of necessity and sufficiency across the length of the whole chain (i.e., examining all three actors). The pattern was more frequently found when only examining the relationship between two elements of the chain (e.g., the middle manager and the lower agent). It was also of note that the majority of the significant interactions within our different models were driven by middle manager experimental manipulations as opposed to top manager experimental manipulations. It appears that because Kanekar and Miranda were only looking at a two-entity chain, their results (that a sufficiency chain results in initiating actor culpability and a necessity chain results in proximal actor culpability) do not hold for chains involving more than two actors.

The work of Chu and Shaw (2005) was found to be somewhat supported when applied to the longer causal chains in the current study. Their results suggested that people prefer chains of causes over a single cause and that chains typically stop with a dispositional (internal) cause. It should be noted, however, that their work did not

examine causal chains within an organizational hierarchy. They examined positive and negative outcomes that were impacted by one of several different possible factors (e.g., other people, motivation).

Even though there was clear evidence in the current study that individuals can and do attribute culpability to individuals earlier in a causal chain, the proximity to an event was still one of the key factors in determining culpability. The work of Chu and Shaw (2005) was strongly supported in the present study, with regard to their findings related to dispositional causes. The current study consistently found that the agentic elements (e.g., choice) were stronger drivers when determining culpability than the situational pressures (e.g., the actor before them forcing or enabling them to act). In general, Chu and Shaw's results translated well in the current study, and their original findings were corroborated even when examining more complex causal chains.

Prior research into the impact of human action and foreseeability in causal chains was also highly supported in the current study. McClure and colleagues (2007) noted that voluntary human action resulted in high attributions of causality, and Hilton and colleagues (2016) contend that these actions are seen as even more culpable when actors can foresee the outcomes of their actions. This pattern also emerged in the current study. Whether or not an actor had a choice tended to be the most important element in determining attributions of culpability: When an actor had a choice, they were more culpable compared to when they did not. This was followed by the actor having foreseeability of the consequences of his actions being the next most important element. Often when the actor had both choice and foreseeability he was most culpable, and when he had no choice and no foreseeability he was less culpable.

The research by Hilton and colleagues (e.g., Hilton et al., 2005; Hilton et al., 2010) suggested that the concepts of actions being necessary or sufficient to bring about a cause were key elements in determining attributions of culpability. Although we did find that these elements played a role in the attributional decisions in the current study, they were not as consistent as actor choice and foreseeability. This indicated that as causal chains increase in complexity, the impact of other's actions on a lower actor were less important than the lower actor's actions themselves. In terms of the current study, this means that the Top and Middle Manager Choice and Foreseeability mattered more than Top or Middle Manager Sufficiency/Necessity.

Much of the previous literature on reasoning (e.g., Hilton et al., 2005) is rooted in the assumption that reasoning about causal chains is mostly a bottom-up process whereby individuals engage in an analysis of what happened based on the facts provided. They parse the evidence of what happened and then arrived at a conclusion of who should be held responsible for the outcome. While the current study found evidence to support this belief, there was also support for top-down reasoning. This is consistent with Kanekar and Miranda (1998), who found that there was more ambiguity in the attribution of blame for those who were more distal to the event and that these attributions were more likely to be influenced or "disambiguated" by relying on pre-existing beliefs.

Specifically, when certain attitudinal individual difference variables were included in the model (e.g., civil juror litigation crisis attitudes), we found that people were guided first by their personal beliefs and those impacted how they examined the evidence. Focusing on the example of CJLCA, our results suggested that individuals who believed that there was a litigation crisis (i.e., those high in CJLCA) would often not

consider certain elements of evidence that would contribute to the idea that several persons should be held responsible for the wrongdoing. Their unwillingness to consider that several different actors responsible for an outcome was consistent with their belief that there was too much litigation, and thus the focus should primarily be on the actor who directly caused the negative outcome and not on those earlier in the causal chain who might have influenced or forced certain actions.

The middle manager was where most of the interesting findings occurred. It was the inclusion of this middle actor that made the current study novel (and messy). The middle manager tended to be considered least culpable (with either the lower agent or top manager being considered most culpable), but the middle manager was also where we found the biggest swings in culpability. Frequently they were the actors with the lowest culpability, but there were times when they had the most culpability. It was these extreme differences that existed which created the large swings in culpability. In general, the individuals who initiated the causal chain and actually did the wrongdoing (the top manager and lower agent, respectively) were the people who were consistently found the most culpable. However, the actions and thoughts of both the top and middle managers could greatly impact middle manager culpability and resulted in inconsistent levels of culpability based on the scenario. Even though there were three actors, it is important to remember that the lower agent was not subject to any experimental manipulation.

What our Results tell us about the Responsibility/Blame Literature

The literature suggested that responsibility and blame were distinct concepts (e.g., Mantler, Schellenberg, & Page, 2003), yet in several studies (including the current one) there were no significant differences between the results for these outcome variables. If

one views responsibility and blame as being on a continuum, the very nature of the scenarios may have been the reason that participants did not differentiate between these two concepts. The scenarios were written in such a way that the reader might jump straight to the blame portion of the continuum, thereby skipping over making the arguably less emotionally charged responsibility attributions. In other words, by the time we asked participants about their attributions, they may have already made their blame attributions and were not able to “go back” to their responsibility attributions. This might have resulted in the results not showing much differentiation between responsibility and blame. Perhaps asking participants about their attributions at different points in the scenario would allow for the examination of when responsibility and blame attributions are distinct and when they start to converge. Another potential change would be to not make the outcome of the scenario known to the participants and ask “if X would happen, how responsible/blameworthy would you find Y?” This could remove the inherently negative attributions associated with the scenario.

It is worth noting, however, that in a real-world scenario of having participants act as jurors, they would hear about the negative outcome early on—which would likely color their opinions. This would make the distinction between responsibility and blame more difficult if, as discussed earlier, responsibility and blame are on a continuum. The jurors may be jumping straight to the emotionally charged attributions of blame, making it more difficult to remove those thoughts and feelings to consider responsibility. Also, complex causal attributions do not occur when the situation is clear-cut; rather, they occur when expectancies are violated (Wong & Weiner, 1981).

Another potential way to mitigate this was to provide a thorough explanation of

differences between the concepts of responsibility, blame, and liability. Even when people were able to differentiate between these concepts, there was likely variation between individuals on exactly what it was that these terms meant. If they were provided with concrete definitions of how they should view these three concepts, participants might be better able to differentiate between them.

What our Results tell us about the Psychology and Law Literature

Prior research found that when causality can be clearly (as opposed to ambiguously) linked to an individual/entity, attributions of responsibility increase (Schmidtgoessling, 1978; Shultz et al., 1981). Similarly, when there is an intervening cause (i.e., something that occurred between the initial behavior and the outcome), attributions of causality and blame decrease (Fincham & Shultz, 1981). In the current study there was support for increased culpability when causality was clearly linked and mixed support for the finding that an intervening cause reduces culpability. The most apparent link to the wrongdoing in our scenarios was the lower agent, and he was fairly consistently held most culpable regardless of the actions of the top and middle managers. When examining the impact of an intervening cause we see that (occasionally) the actions of the middle manager can decrease the culpability of the top manager, but this is not as consistent as the finding pertaining to the direct link to the wrongdoing.

Several researchers have previously found a link between the severity of the wrongdoing and the amount of blame and responsibility jurors assign to the responsible party (Hans & Dee, 2002; Laufer et al., 2005). Specifically, as the severity increases, so does culpability. Although we did not specifically vary level of severity in our scenarios, all of the outcomes were quite severe, and correspondingly levels of culpability were high

(i.e., the “lowest” culpability ever was for any of our interactions was still a number greater than four, the mid-point of the seven-point response scale). Therefore, the findings of the current study are at least consistent with the idea that more severe wrongdoings result in increased culpability.

The present research offers several implications for how attorneys should go about making their cases and jury selection. In terms of case presentation, the current findings highlight the importance of how the facts of the case are framed and what information is emphasized. The story model of juror decision making (Pennington & Hastie, 1993) proposes that jurors organize the information they hear during a trial into a narrative, which they rely on to determine their verdict. Based on this model, whoever tells the “better” story wins. If an attorney wants to persuade the jury that the person at the beginning of the chain should be held most culpable, they should emphasize the agential factors for the person at the beginning of the chain. At the same time, they should de-emphasize the level of agency that actors further along in the chain had in bringing out an outcome. For example, an attorney may frame the narrative so that the CEO of the company had a choice in his actions, knew the potential negative outcomes, and forced those below him in the causal chain to do his bidding. In addition to this, the attorney may highlight that other actors within the chain did not have a choice and did not have foresight into the potential negative outcomes. This general pattern can be used to emphasize the culpability of any actor within the chain, depending on the goals of the attorney.

Based on the present findings, less emphasis ought to be placed on sufficiency/necessity. In other words, preconditions to agency, which in a more technical sense either

predetermined an actor's behavior or only enabled it, were less important than the actual agential factors. Some framing strategies may rely on both the factors that influenced the actor's actions and the actor's actions themselves (e.g., "He was not forced to do X, and yet he did it anyway") as a result of these two elements being intrinsically linked. In these situations, however, individual choice and intentionality should be highlighted.

There may be a slightly greater challenge for an attorney when the previous actor required a particular action or type of action on the part of the next actor in the chain. In these situations, the next actor's behavior and decisions may seem to be predetermined. However, because these logical links (i.e., whether the actor earlier in the chain required or enabled the next actor to act) weigh less heavily in observers' attributions, it is critical that an attorney's framing focuses on agency, or lack thereof. Even in an organizational context, when the decision of a superior seems to order the actions of a subordinate, it is critical to highlight that the subordinate had a choice in following the order. An attorney could emphasize that even though refusing a direct demand from a superior may come at considerable personal costs, people still ultimately have a choice in their actions.

There is some support for the use of the "Eichmann defense" when framing the case facts. The "Eichmann defense" refers to the trial of Adolf Eichmann, an officer in the SS who, when tried for his crimes as a Nazi, used the defense that he was just following orders and therefore should not be held responsible (Cesarani, 2005). In general, the current study's results show that the general proclivity is to hold the people at the beginning and end of the causal chain most culpable, leaving the person in the middle least culpable. Attorneys can capitalize on this if they want to minimize the amount of culpability assigned to an actor in the middle of the chain. If an attorney highlights the fact that

the person in the middle of the chain was forced to act by those earlier in the chain and/or higher up in the organizational hierarchy while also emphasizing that the middle actor did not directly do the wrongdoing, middle actor culpability will typically be mitigated.

In terms of jury selection, the current findings demonstrate the importance of understanding certain personally held beliefs that jurors might have – an idea that several previous studies have also found (e.g. Carlson & Russo, 2001; Miller et al., 2014). Individuals in a position of leadership within a large corporation, and thereby their actions, are often closely associated with the company itself and drive what is socially acceptable for others within the organization. At times the activities of the business may be held back by the actions of those lower in the organizational hierarchy who do not align with the company's practices and standards. In other words, those in top positions within an organization may be more identified with the business as a whole, while those lower in the chain of command of an organization are less identified with the company. Therefore, favoring big businesses may equate to favoring the activities of individuals in top management positions. Attorneys can use this information to their advantage because a lower-level employee of the company may engage in actions on behalf of the company, but the actions may not be seen as being reflective of the company or the top-level managers. Mid-level individuals may act to mitigate the culpability ascribed to top-level individuals.

For example, we found that when individuals really like big businesses, they are more likely to use the middle manager as a buffer for top manager culpability. This finding was in contrast to the more consistent finding that there was support for the "Eichmann defense" decreasing middle manager culpability. In general, we found this

type of reasoning in our study (with the top and lower agents being more culpable than the middle agent). However, when individuals were fond of big businesses, there were situations in which they would hold the middle agent more culpable than the top agent – suggesting that the middle agent was acting as a “buffer” for top agent culpability.

Therefore, if an attorney wants to mitigate top agent culpability s/he should try to find jurors who like big businesses. Conversely, if the goal is to decrease the culpability for the middle agent and increase it for the top agent, then an attorney would want jurors who dislike big businesses.

Attributional complexity represented another important characteristic that produced consistent results and therefore may be particularly useful in an applied setting. As discussed previously, individuals high in attributional complexity (i.e., those who enjoy engaging in effortful thought) differentiate between the actors within a causal chain and assign culpability accordingly. Individuals low in attributional complexity, on the other hand, did not differentiate between the actors – they tended to hold all the actors within a chain equally culpable. Therefore, if an attorney wishes to spread the culpability around more evenly amongst the different actors within a causal chain, s/he will want to have jurors low in attributional complexity. If, however, an attorney wants to highlight that certain actors should be held more culpable, s/he will want to have jurors high in attributional complexity. Although an attorney most likely does not want to simply ask how much jurors like big business or how much they enjoy engaging in effortful thought, it is possible to tap these underlying constructs by asking other questions that can work as proxies. Especially useful for determining attributional complexity might be questions that can provide insight in to how the jurors are thinking about things and making

connections. For example, if an attorney provides an example situation and then asks follow up questions to see how the potential jurors are thinking about the situation, s/he may be able to determine which individuals are relying on obvious connections/relationships and which are seeing more nuanced distinctions in the scenario. Those who are accounting for the nuances are likely those who are higher in attributional complexity. These types of reasoning tasks are likely better indicators of attributional complexity as opposed to looking for specific factors that may be associated with attributional complexity (e.g., education level). Specific things like education level may provide some insight into potential level of attributional complexity, but these are less telling than actually attempting to see how individual potential jurors think about information and arrive at decisions.

What our Results tell us about the Organizational Literature

Research in to hierarchical organizations highlights the importance of relationships within the hierarchy. Vaughan (1992) argued that as organizational complexity increased, so did the complexity around determining responsibility for an outcome. This insight was reflected in the current study. We found that by using very complex scenarios, previous relationships that existed when using simple scenarios were no longer predominant. For example, previous studies using simple scenarios to examine the impact of necessity and sufficiency found consistent results, whereas our study's results were less straightforward as a result of the complex scenarios.

The nature of “wrongdoing” in the current study is fairly indirect. For example, changing from an established supplier to a new one is not inherently bad. Even though the scenarios in the current study have the companies switching from their current

practices or supplier to something of lower quality, this again does not guarantee a wrongdoing will occur. However, if a wrongdoing does occur on the part of the new supplier, then the origins of the decisions that allowed the wrongdoing to happen were investigated, and that was when the decision to switch suppliers may be labeled a “bad” decision. This, however, was how culpability was typically assigned within an organization. Going back to the Wells Fargo example, if the higher-level management pressured those lower in the company to open more new accounts and no one ever did anything wrong (i.e., the individuals in the bank branches simply tried to get the customers to open more accounts, but they never fraudulently opened accounts), then the actions of those managers would not have been seen as improper. It was only as a result of the negative outcome, that their actions would then be interpreted as being improper.

Another element to consider was that when a wrongdoing occurred within an organization, two different things are often considered: (1) someone needs to be blamed and appropriately punished to restore faith in the organization and (2) the company should be sanctioned in a way that acts as a deterrent for other organizations to not act in the same manner. Those within the organization want to make sure they are taking appropriate steps so that stakeholders, investors, and customers have confidence in the organization again. However, people within the organization are likely less concerned with ensuring that other similar businesses do not make the same mistake they did. This is a concern for those within the justice system and government, as those are the agencies tasked with protecting people from harm and preventing future wrongdoings.

As we saw in our results, it was the person who actually did the wrongdoing that was held most culpable, followed by the individual at the top of the company. The middle

manager was often the least culpable. This is consistent with the notion that the people who committed the wrongdoing should be held culpable, but the person in charge of the organization (and who is typically associated with the company's outcomes, both good and bad) should also be held accountable. This tends to protect the middle manager, as he neither directly did the wrongdoing nor was he the figurehead of the company. However, a potential way to increase the culpability of an actor in the middle of a causal chain would be to have a way to prove their personal agency. If for example, top-level managers can show that middle-level managers had a choice in what they did, top-level manager culpability should decrease and middle-level manager culpability should increase.

What our Results tell us about the Literature around Cultural Differences

A consistent finding in previous literature was that individuals from collectivist cultures tend to hold the leaders of an organization culpable for both their own actions and the actions of others within the company (Zemba & Young, 2012; Zemba et al., 2006). With individuals in collectivist cultures being more likely to hold interdependent self-construals than individuals in individualist societies, various authors (e.g., Markus & Kitayama, 1991) have suggested that individual differences in interdependence may parallel those found between collectivist and individualist cultures. In the current study, this would mean that individuals high in interdependence should hold the top managers more culpable than those low in interdependence. In our findings, however, this did not occur. There was only one combination of experimental conditions in which the top manager was held significantly more culpable and that was by individuals low in interdependence.

Sanders and colleagues (1996) found that Americans (arguably individuals high in independence) tend to hold each actor more responsible than their Japanese counterparts (arguably individuals high in interdependence). However, when there was causal ambiguity, there was a decrease in responsibility for all actors regardless of cultural location. The scenarios in the current study were very complex and thus can be thought to result in increased causal ambiguity. We, however, did not find a decrease in culpability; rather, it appeared to be that people would rely more on simpler elements of the story (e.g., proximity) to determine the bulk of the culpability.

Tetlock and colleagues (2010) found that individuals in more individualistic cultures, such as the U.S., tend to view pressure from another actor as a mitigating factor when determining culpability. However, those in collectivist countries do not – they maintain the same level of culpability for the individual and then add extra culpability on to the actor who pressured him. In the current study we did not find this effect for interdependence or independence. High interdependence individuals actually held the middle manager more culpable when his actions were necessary as opposed to sufficient, and high independence individuals continued to hold the lower agent highly culpable regardless of whether the middle manager's actions were necessary or sufficient.

Research by Kanekar and Miranda (1998) suggests that for high interdependence individuals, a recency effect should be found for causality and a primacy effect should be found for blame. In terms of the current study this means that, when examining responsibility, the lower agent should be held more culpable, and when examining blame, the top manager should be held more culpable. Because we ended up combining our dependent variables into one measure of overall culpability, we were not able to examine

the differences between responsibility and blameworthiness. In general, our measure of culpability tended to act more like how Kanekar and Miranda would predict determining responsibility would operate, as opposed to blame, and those higher in interdependence did tend to hold all parties more culpable than their low interdependence counterparts (although this difference was normally not statistically significant).

In general, our findings related to cultural differences were very limited by the fact that the cultural dimension was measured as an individual difference within only one country. Prior research (e.g., Zemba & Young, 2012; Sanders et al., 1996) found that there were several distinct differences between more individualistic and collectivistic cultures. In the current study, however, the results examining levels of independence/interdependence for individuals do not support as strong of a difference between these groups. There were several distinctions that could be made for those higher and lower in independence and interdependence, but these were less strong and less consistent than what previous studies have found (e.g., Kanekar & Miranda, 1998; Sanders et al., 1996). One potential reason may be related to the fact that our sample was all from the United States, and that even when individuals were higher in interdependence, they may still be colored by the overarching high levels of independence prevalent in US society. To put it differently, because our sample consisted of Americans, we may not have been able to tap into those differences that other researchers have found when using participants that actually come from predominately collectivist societies. Another possibility is that earlier studies might have tapped cultural differences that do not map onto independence-interdependence. There is arguably a large number of potential differences between cultures, and although much of the social-

psychological literature has tended to focus on independence-interdependence or individualism-collectivism, it does not mean that observed cultural differences in these behaviors are related to only these dimensions.

Study Limitations and Areas for Future Study

As with any study, there were several limitations and areas for future studies. To fully understand the implications of the current study's findings, it was important to know the nature of the models/scenarios we ran. By using within-participants/repeated measures manipulations for the choice variables (i.e. Top Manager Choice and Middle Manager Choice), we gave participants a chance to focus on the subtler aspects of the manipulation. Seeing that a manager's behavior was sufficient for the next person in the chain in one scenario, but that the manager's behavior was only a necessary precondition for the lower person in the next scenario, makes the contrast more salient. Arguably, for many participants a similar contrast also existed within the same scenario itself, as there were scenarios in which the top and middle managers had different necessity/sufficiency conditions. With choice, however, participants were not aware that we were manipulating this variable and thus it may not have been as salient. Even with choice not being highlighted as different across the scenarios, it was still a very prominent factor in determining culpability. Also, with regard to foreseeability, there was the limitation that it was only varied such that in some conditions the manager did foresee the consequences of his action, whereas in other conditions there was no mention of his foreseeability. Strictly speaking, the manipulation only referred to whether managers did foresee or not, not whether they were able to foresee or not.

Another important element to note was that because of the way the scenarios were

structured, most of the emphasis was on the actions and knowledge of the top and middle managers. There was not much information provided about the lower agent, other than the fact that he was the one who was directly linked to the wrongdoing. Arguably, it was always assumed that the lower agent would be the executor of the top/middle manager's action, without having a choice themselves. With foreseeability not being mentioned, it can be assumed that the lower agent did not foresee the consequences of their actions. Because the experimental manipulations were in relation to the top two actors, the bulk of the emphasis was on the impact of managers' actions on others within the chain. There will always be individuals who make mistakes, so we were more interested in the impact of those managers in determining culpability.

In this study we were not able to delve deeper into the differences between attributions of responsibility, blame, and liability due to the nature of the responses being highly similar. Future studies should do more to make sure the distinctions between these concepts is clearer. For example, providing participants with clear definitions of what we mean by responsibility, blame, and liability and what the difference was between them may result in more unique responses for each of these types of attributions. Another potential change to the study design could be removing the information about the negative outcome of these decisions from the scenarios. Having these negative outcomes already known before they made their attributions, may have impacted attributions of responsibility, which do not depend on a negative event happening like blame does. Future studies could provide participants with both positive and negative outcomes and see how the nature of the outcome impacts the attributions made within a causal chain.

We also made the decision, in the current study, to have participants rate actor

culpability on a scale in a manner that would allow for all actors to be highly culpable or not culpable at all. While this method was useful for examining overall attributions of culpability, it was not compatible with how actual decisions regarding liability are made within a courtroom (whereby liability is divided out among the different actors based on the preponderance of the evidence standard). To better tap into this, future studies should include the element of having participants parse out liability amongst the actors as they would if they were actual jurors in a civil trial. These studies could also include the element of damage awards to see how position within the hierarchy, in addition to the other manipulated elements, may impact damage award amounts.

Another limitation of the current study was that it only examined fairly rapid causal attributions, not more lengthy processes in arriving at a decision. Learning about the nature of these rapid causal attributions was valuable to tell us more about initial causal decisions, but often (and especially in courtroom settings) there is a much longer amount of time that individuals spend thinking about all of the details before arriving at a final decision about who should be held culpable for an outcome. It was also possible that, due to the nature of our scenarios being quite complex, participants may have concentrated on the aspects of the scenarios that were more compelling or salient to them and ignored others. If individuals were given more time to contemplate the impact of these decisions, we may find different results.

Two potential ways to ensure that each of the areas of interest were fully considered, would be to add review questions into the study or to include an element of deliberation. Including questions such as “Did the top manager require or merely enable the middle manager to act?” after the participant read the scenario but before they made

their causal attribution decisions would make the key elements of the scenario more salient. This would make it more likely that participants would consider these factors when making their culpability decisions. These types of questions could, however, highlight to the participants that they ought to consider this particular aspect of the scenario because the experimenter wants them to. As a result, they may no longer respond naturally, but essentially follow experimenter demand.

It is also possible that having a period of deliberation with others would help to highlight the most crucial elements of the scenarios. When people are required to sit and talk about the facts of the scenario with others, the comments made can result in all of those deliberating considering factors that they may not have thought about on their own. For example, it is possible that one person in the deliberating group was really only considering whether or not a person had a choice as the main factor driving his decision, but after another group member mentions that the fact that the top manager forced the middle manager to act was a main factor to her, he may then shift his initial conclusions to allow for the inclusion of this newly highlighted piece of evidence.

Another limitation is the complexity of the scenarios. The scenarios were made to be complex by design because real world situations are complex, and we wanted to tap into the cooccurrence of multiple situational factors. However, this also made the results complex and at times difficult to interpret. For future studies, it may be useful to run each of the elements we manipulated within our scenarios individually first to see how they impact causal reasoning within a causal chain when they are the only salient factor, and then run models that combine these elements to see how combining them impacts causal reasoning. This could be especially important for examining the impact of sufficiency

and necessity, a factor that appeared to frequently not be as salient as choice and foreseeability.

Two areas to examine in future studies to further expand upon the dynamics of attributions within a causal chain are essentiality and entitativity. The concepts of essentiality and entitativity are key when determining collective culpability (or responsibility). Collective culpability can be thought of as the willingness of an individual to blame a group (or the group's members) for the wrongdoing done by another member of the group (Chao, Zhang, & Chiu, 2008). In other words, in the current study, the role of individuals was examined, but future studies should further examine and study the collective culpability of a group/entity and how that impacts others within a causal chain. This would allow for broader questions about how much the company should be held culpable as opposed to just how much those individuals within a company should be held culpable.

Chapter 9: Conclusion

Undesirable, but avoidable organizational outcomes are often the result of several parties acting together with each sharing some of the culpability. Causal chains occur when one party's actions are contingent on the actions of another party such that they can be viewed as a consequence of the previous actor. How culpability is assessed in such a situation is critical especially in civil law in matters of organizational wrongdoing, as the party that was instrumental in bringing about a negative outcome may have been constrained or enabled by the actions of others. This is especially true when examining wrongdoing that occurs within an organization.

Organizations are complex places, comprised of individuals in relationships with others from various positions of power within the company. The actions of an individual within an organization are impacted both by the decisions s/he makes and the decisions of those around him/her. Events like the Wells Fargo banking fraud (i.e., creating unauthorized accounts) and similar organizational fraud occur frequently. These situations highlight the importance of research examining how individuals parse out attributions of culpability to the different parties involved. Often these situations result in very complex causal chains that can make it difficult to determine who should be held culpable. The current study sought to examine just these types of complex situations by expanding on prior research in a number of academic fields. We concluded that when examining complex causal chains, the determination of culpability was highly variable, based on the set of conditions in which the wrongdoing occurred.

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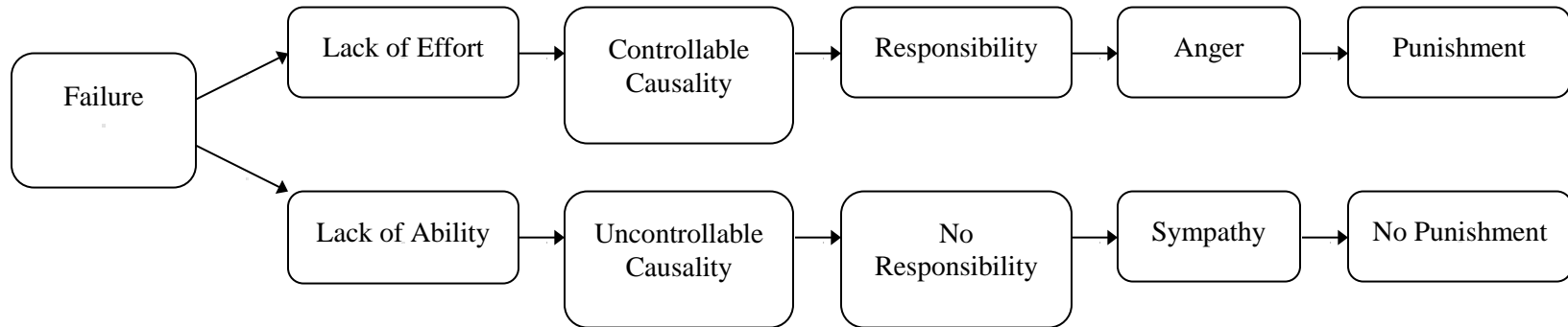
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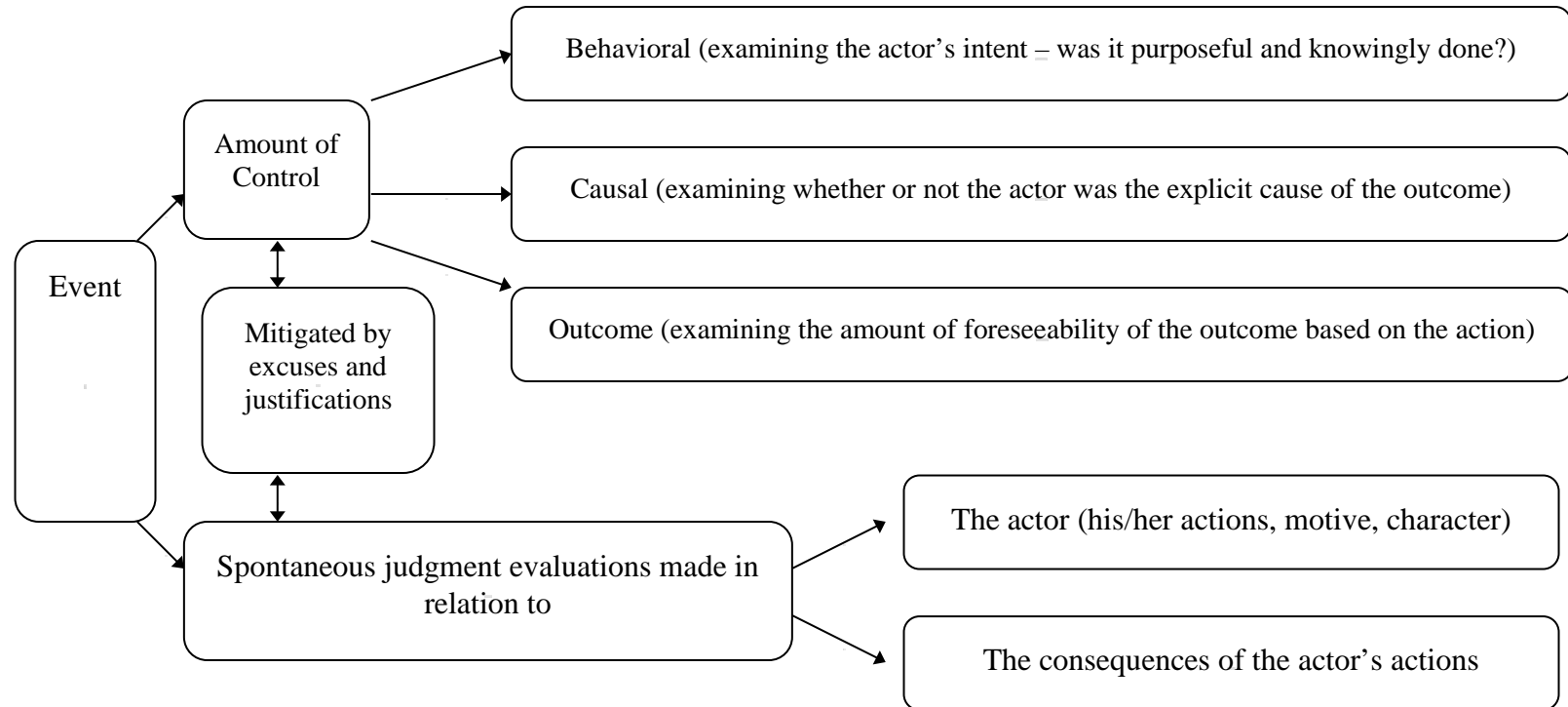
Figure 1. Weiner's attribution of responsibility model, Alicke's culpable control model, and the Step Model of Blame.

Weiner's attribution of responsibility model (blame late model):

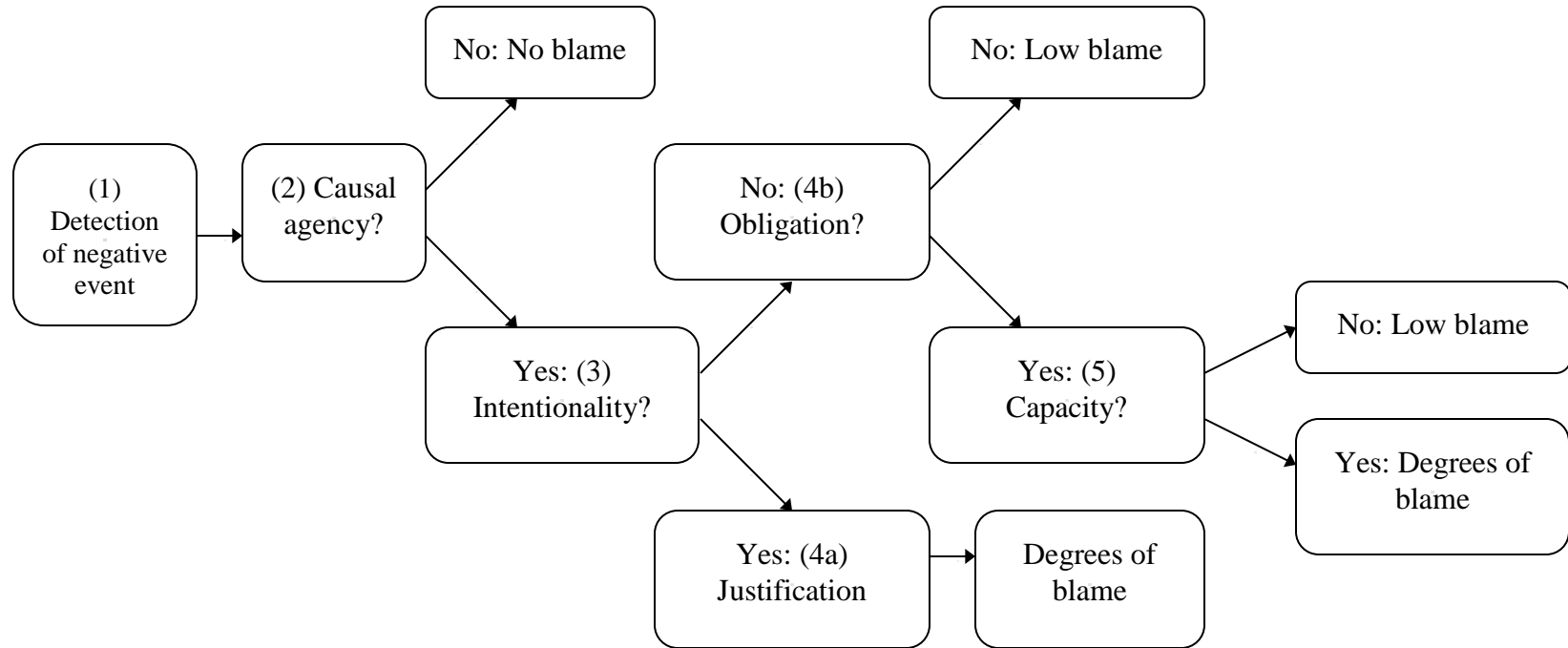
Attribution (causal controllability) → assigned responsibility → emotion → behavior



Alicke's culpable control model (blame early model):



Malle, Guglielmo, and Monroe – Step Model of Blame:



Note: The Step Model of Blame process works as follows – (1) Detecting that some negative outcome or event deviated from a shared norm. (2) Assessing that an agent caused this outcome or event. (3) Deciding whether the agent brought about the event intentionally. Once this decision has been made, two very different tracks lead to blame. If the agent is believed to have acted intentionally, (4a) Perceivers consider the agent’s reasons for acting. Blame then is graded depending on the justification that these reasons provide—minimal blame if the agent was justified in acting this way; maximal blame if the agent was not justified. If the agent is believed to have acted unintentionally, (4b) Perceivers consider whether the agent should have prevented the norm-violating event (obligation) and (5) whether the agent could have prevented the event (capacity).

Appendix A. Scenarios

Sufficiency/necessity, foreseeability, and choice scenarios

(Note: For each scenario, the necessity, sufficiency, foreseeability, and choice conditions are all manipulated – resulting in 64 conditions for each scenario. The four conditions needed to see each of the manipulations for the scenarios are listed below)

(1) Faulty Product Scenario –

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The CFO of a toy company needs to find a way to increase the company's profits. After examining the company's expenditures, he knows there is no alternative, and so he decides to require the manufacturing department to contribute to the financial health of the company by cutting costs. In order to cut costs, the manufacturing department manager cannot see any alternatives, and so decides to terminate the company's existing contract with their materials supplier in favor of a cheaper vendor. The new materials end up resulting in products that quickly break and pose a health hazard to users, resulting in the injury of several children.

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The CFO of a toy company needs to find a way to increase the company's profits. After examining the company's expenditures, he knows there are alternative routes to increasing profits, and he is torn between them. Eventually, he decides to require the manufacturing department to contribute to the financial health of the company by cutting costs. The CFO knows that this will put the manufacturing department in a position where it may no longer be able to fund existing contracts, including the contract with their current materials supplier. The manufacturing department manager has a number of alternatives in the ways he can cut costs, and eventually decides to cut costs in his department by terminating their existing contract with their materials supplier in favor of a cheaper vendor. The manager knows that this might result in a decrease in product quality. The new materials end up resulting in products that quickly break and pose a health hazard to users, resulting in the injury of several children.

Top Manager Necessary-Middle Manager Necessary-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

Necessity1-Necessity2-Foreseeable1No-Foreseeable2No-Choice1No-Choice2No
The CFO of a toy company needs to find a way to increase the company's profits. After examining the company's expenditures, he knows there is no alternative and passes this information along to the manufacturing department manager, thereby enabling the manager to make the decision if he wants to contribute to the financial health of the company by cutting costs in his department. In order to cut costs, the manufacturing department manager cannot see any alternatives, and so decides to enable the

manufacturing department to let the existing contract with their materials vendor to expire. A new, cheaper vendor secures the new contract. The new materials end up resulting in products that quickly break and pose a health hazard to users, resulting in the injury of several children.

Top Manager Necessary-Middle Manager Necessary-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The CFO of a toy company needs to find a way to increase the company's profits. After examining the company's expenditures, he knows there are alternative routes to increasing profits, and he is torn between them. Eventually, he passes this information along to the manufacturing department manager, thereby enabling the manager to make the decision if he wants to contribute to the financial health of the company by cutting costs in his department. The CFO knows that this will put the manufacturing department in a position where it may no longer be able to fund existing contracts, including the contract with their current materials supplier. The manufacturing department manager has a number of alternatives in the ways he can cut costs, and eventually decides to enable the manufacturing department to let the existing contract with their materials vendor to expire. The manager knows that this might result in a decrease in product quality. A new, cheaper vendor secures the new contract. The new materials end up resulting in products that quickly break and pose a health hazard to users, resulting in the injury of several children.

(2) Safety within a Factory Scenario –

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The owner of a new factory needs to get the factory ready to start production quickly as to not miss out on a large manufacturing contract. Given the factory's situation, he knows there is no alternative, and so he decides to require a very tight deadline for safety checks. The Chief safety engineer cannot see any alternatives, and so decides to require the safety team to only do a cursory check of the factory's electrical wiring. There ends up being faulty wiring in one part of the factory that results in a fire starting 6 months into operations. Several employees are hospitalized for severe injuries and three employees die in the fire.

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The owner of a new factory needs to get the factory ready to start production quickly as to not miss out on a large manufacturing contract. Given the factory's situation, he knows there are alternative routes to opening the factory quicker, and he is torn between them. Eventually, he decides to require a very tight deadline for safety checks. The owner knows that this will put the safety engineer in a position where he might not be able to do as thorough of safety checks as he normally would. The Chief safety engineer has a number of alternatives in the ways he can get the factory ready for operations, and eventually decides to require the safety team to only do a cursory check of the factory's

electrical wiring. The safety engineer knows that this might result in an increase in issues surrounding wiring in the future. There ends up being faulty wiring in one part of the factory that results in a fire starting 6 months into operations. Several employees are hospitalized for severe injuries and three employees die in the fire.

Top Manager Necessary-Middle Manager Necessary-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The owner of a new factory needs to get the factory ready to start production quickly as to not miss out on a large manufacturing contract. Given the factory's situation, he knows there is no alternative and passes this information along to the Chief safety engineer, thereby enabling him to make the decision if he wants to contribute to the financial health of the company by having a very tight deadline for safety checks. The Chief safety engineer cannot see any alternatives, and so eventually decides to enable the safety team to do a cursory check of the factory's electrical wiring. There ends up being faulty wiring in one part of the factory that results in a fire starting 6 months into operations. Several employees are hospitalized for severe injuries and three employees die in the fire.

Top Manager Necessary-Middle Manager Necessary-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The owner of a new factory needs to get the factory ready to start production quickly as to not miss out on a large manufacturing contract. Given the factory's situation, he knows there are alternative routes to opening the factory quicker, and he is torn between them. Eventually, he passes this information along to the Chief safety engineer, thereby enabling him to make the decision if he wants to contribute to the financial health of the company by having a very tight deadline for safety checks. The owner knows that this will put the safety engineer in a position where he might not be able to do as thorough of safety checks as he normally would. The Chief safety engineer has a number of alternatives in the ways he can get the factory ready for operations, and eventually decides to enable the safety team to do a cursory check of the factory's electrical wiring. The safety engineer knows that this might result in an increase in issues surrounding wiring in the future. There ends up being faulty wiring in one part of the factory that results in a fire starting 6 months into operations. Several employees are hospitalized for severe injuries and three employees die in the fire.

(3) Food Poisoning Scenario –

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The CEO of a large food processing company, ABC Foods Inc., needs to increase the company's profits. Given the company's situation, he knows there is no alternative, and so he decides to cut funds going to the fresh produce department of the company. The produce department Manager cannot see any alternatives, and so decides to terminate the company's existing contract with a high quality fresh produce vendor in favor of a more affordable one. A few months after switching vendors, there was a widespread E. coli

outbreak, sickening several thousand people, that was linked back to spinach sold by ABC Foods Inc.

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The CEO of a large food processing company, ABC Foods Inc., needs to increase the company's profits. Given the company's situation, he knows there are alternative routes to increasing profits, and he is torn between them. Eventually, he decides to cut funds going to the fresh produce department of the company. The CEO knows that this will put the produce department in a position where it may have to start working with cheaper produce vendors. The produce department Manager has a number of alternatives in the ways he can cut costs, and eventually decides to terminate the company's existing contract with a high quality fresh produce vendor in favor of a more affordable one. The Manager knows that this vendor change might impact the quality of the produce distributed to customers. A few months after switching vendors, there was a widespread E. coli outbreak, sickening several thousand people, that was linked back to spinach sold by ABC Foods Inc.

Top Manager Necessary-Middle Manager Necessary-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The CEO of a large food processing company, ABC Foods Inc., needs to increase the company's profits. Given the company's situation, he knows there is no alternative and passes this information along to the manager of the fresh produce department of the company, thereby enabling the manager to make the decision if he wants to contribute to the financial health of the company by cutting costs in his department. The produce department Manager cannot see any alternatives, and so decides to enable the produce department to let the existing contract with their high quality fresh produce vendor to expire. A new, cheaper vendor secures the new contract. A few months after switching vendors, there was a widespread E. coli outbreak, sickening several thousand people, that was linked back to spinach sold by ABC Foods Inc.

Top Manager Necessary-Middle Manager Necessary-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The CEO of a large food processing company, ABC Foods Inc., needs to increase the company's profits. Given the company's situation, he knows there are alternative routes to increasing profits, and he is torn between them. Eventually he passes this information along to the manager of the fresh produce department of the company, thereby enabling the manager to make the decision if he wants to contribute to the financial health of the company by cutting costs in his department. The CEO knows that this will put the produce department in a position where it may have to start working with cheaper produce vendors. The produce department Manager knows there are a number of alternatives in the ways they can cut costs, and eventually decides to enable the produce department to let the existing contract with their high quality fresh produce vendor to expire. The Manager knows that this vendor change might impact the quality of the produce distributed to customers. A new, cheaper vendor secures the new contract. A few

months after switching vendors, there was a widespread E. coli outbreak, sickening several thousand people, that was linked back to spinach sold by ABC Foods Inc.

(4) Cyber Security Scenario –

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The CEO of a company needs to make a difficult decision because of the company's lower than expected revenues over the previous three quarters. Given the company's situation, the CEO knows there is no alternative, and so he decides to require the IT department to cut costs. The Chief IT manager cannot see any alternatives, and so decides to cut costs in his department by terminating an expensive contract with a high-level internet security firm in favor of a cheaper alternative. Their website is hacked, and most of their customer's information and credit card numbers are exposed.

Top Manager Sufficiency-Middle Manager Sufficiency-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The CEO of a company needs to make a difficult decision because of the company's lower than expected revenues over the previous three quarters. Given the company's situation, the CEO knows there are alternative routes to cutting costs, and he is torn between them. Eventually, he decides to require the IT department to cut costs. The CEO knows that this will put the IT department in a position where it may no longer be able to fund important systems, including the contract with their internet security firm. The Chief IT manager has a number of alternatives in the ways he can cut costs, and eventually decides to cut costs in his department by terminating an expensive contract with a high-level internet security firm in favor of a cheaper alternative. He knows that this will increase the vulnerability of their company to data breaches. Their website is hacked, and most of their customer's information and credit card numbers are exposed.

Top Manager Necessary-Middle Manager Necessary-Top Manager No Foreseeability-Middle Manager No Foreseeability-Top Manager No Choice-Middle Manager No Choice

The CEO of a company needs to make a difficult decision because of the company's lower than expected revenues over the previous three quarters. Given the company's situation, the CEO knows there is no alternative and passes this information along to the Chief IT manager, thereby enabling the manager to make the decision if he wants to contribute to the financial health of the company by cutting costs in his department. The Chief IT manager cannot see any alternatives, and so decides to enable the IT department to let the existing contract with a high-level internet security firm to expire. A new, cheaper security firm wins the new contract. Their website is hacked, and most of their customer's information and credit card numbers are exposed.

Top Manager Necessary-Middle Manager Necessary-Top Manager Foreseeability-Middle Manager Foreseeability-Top Manager Choice-Middle Manager Choice

The CEO of a company needs to make a difficult decision because of the company's lower than expected revenues over the previous three quarters. Given the company's situation, the CEO knows there are alternative routes to cutting costs, and he is torn between them. Eventually, he passes this information along to the Chief IT manager, thereby enabling the manager to make the decision if he wants to contribute to the financial health of the company by cutting costs in his department. The CEO knows that this will put the IT department in a position where it may no longer be able to fund important systems, including the contract with their internet security firm. The Chief IT manager has a number of alternatives in the ways he can cut costs, and eventually decides to enable the IT department to let the existing contract with a high-level internet security firm to expire. He knows that this will increase the vulnerability of their company to data breaches. A new, cheaper security firm wins the new contract. Their website is hacked, and most of their customer's information and credit card numbers are exposed.

Appendix B: Dependent measures and scales

The three dependent measures asked how responsible, blameworthy, and liable each of the three actors were. Participants were also given the option to write in their own response in the form of “other”. The specific terms used to denote the actors varies based on the scenario. Below is an example for the faulty product scenario.

Please indicate how **responsible** each of the parties are for the outcome.

	Not at all responsible	2	3	4	5	6	Completely responsible
The CFO							
The Manager							
The New Vendor							
Other (please specify)							

Please indicate how **blameworthy** each of the parties are for the outcome.

	Not at all to blame	2	3	4	5	6	Completely to blame
The CFO							
The Manager							
The New Vendor							
Other (please specify)							

Please indicate how **liable** (i.e., they should pay for damages and compensation) each of the parties are for the outcome.

	Not at all liable	2	3	4	5	6	Completely liable
The CFO							
The Manager							
The New Vendor							
Other (please specify)							

The individual difference scales used are found below:

Independence/Interdependence:

First, we would like to learn how you would describe yourself. We would like to know how much you personally agree or disagree with each of these statements. Please indicate the level of agreement/disagreement that comes closest to your own response.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I have respect for the authority figures with whom I interact							
It is important for me to maintain harmony within my group							
My happiness depends on the happiness of those around me							
I respect people who are modest about themselves							
I will sacrifice my self-interest for the benefit							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
of the group I am in							
Please indicate the level of agreement/disagreement that comes closest to your own response.							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I often have the feeling that my relationships with others are more important than my own accomplishments							
It is important to me to respect decisions made by the group							
This is to screen out random clicking - please mark 'Strongly disagree'							
I will stay in a group if they need me, even when I'm not happy with the group							
If my brother or sister fails, I feel responsible							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Even when I strongly disagree with group members, I avoid an argument							
Please indicate the level of agreement/disagreement that comes closest to your own response.							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I'd rather say "no" directly, than risk being misunderstood							
Having a lively imagination is important to me							
I am comfortable with being singled out for praise or rewards							
Being able to take care of myself is a primary concern for me							
I act the same way no							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
matter who I am with							
Please indicate the level of agreement/disagreement that comes closest to your own response.							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am							
I prefer to be direct and forthright when dealing with people I've just met							
I enjoy being unique and different from others in many respects							
My personal identity independent of others, is very important to me							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I value being in good health above everything							

The Attributional Complexity Scale:

Please indicate the level of agreement/disagreement that comes closest to your own response.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I don't usually bother to analyze and explain people's behavior.							
Once I have figured out a single cause for a person's behavior I don't usually go any further.							
I believe it is important to analyze and understand our own thinking processes.							
I think a lot about the influence that I have on other people's behavior.							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I have found that the relationships between a person's attitudes, beliefs, and character traits are usually simple and straightforward .							
If I see people behaving in a really strange or unusual manner I usually put it down to the fact that they are strange or unusual people and don't bother to explain it any further.							
I have thought a lot about the family background and personal history of people who are close to me, in order to understand why they are the							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
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sort of people they are.

Please indicate the level of agreement/disagreement that comes closest to your own response.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
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I don't enjoy getting into discussions where the causes for people's behavior are being talked over.

I have found that the causes for people's behavior are usually complex rather than simple.

I am very interested in understanding how my own thinking works when I make judgments about people or attach causes to their behavior.

I think very little about the different ways that people influence each other.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<p>To understand a person's personality/behavior I have found it is important to know how that person's attitudes, beliefs, and character traits fit together.</p> <p>When I try to explain other people's behavior I concentrate on the person and don't worry too much about all the existing external factors that might be affecting them.</p> <p>I have often found that the basic cause for a person's behavior is located far back in time.</p>							

Please indicate the level of agreement/disagreement that comes closest to your own response.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I really enjoy analyzing the reasons or causes for							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
people's behavior.							
I usually find that complicated explanations for people's behavior are confusing rather than helpful.							
I give little thought to how my thinking works in the process of understanding or explaining people's behavior.							
I think very little about the influence that other people have on my behavior.							
I have thought a lot about the way that different parts of my personality influence other parts (e.g., beliefs affecting attitudes or							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<p>attitudes affecting character traits).</p> <p>I think a lot about the influence that society has on other people.</p> <p>When I analyze a person's behavior I often find the causes form a chain that goes back in time, sometimes for years.</p>							
Please indicate the level of agreement/disagreement that comes closest to your own response.							
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
<p>I am not really curious about human behavior.</p> <p>I prefer simple rather than complex explanations for people's behavior.</p> <p>When the reasons I give</p>							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
for my own behavior are different from someone else's, this often makes me think about the thinking processes that lead to my explanations.							
I believe that to understand a person you need to understand the people who that person has close contact with.							
I tend to take people's behavior at face value and not worry about the inner causes for their behavior (e.g., attitudes, beliefs, etc.).							
I think a lot about the influence that society has on my behavior							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
and personality. I have thought very little about my own family background and personal history in order to understand why I am the sort of person I am.							

The Blue Dot Task:

Please click on the little blue circle at the bottom of the screen. Do not click on the scale item below that is labeled from very rarely to very frequently.

	Very rarely	Rarely	Somewhat rarely	Neutral	Somewhat frequently	Frequently	Very frequently
This is just to screen out random clicking							



Condition Prompt:

Next, you will read four different scenarios and answer questions pertaining to each scenario.

Then, the participants were randomly assigned one of each of the four different conditions/scenarios (see Appendix A for a description of these scenarios). After reading each scenario, participants answered the three dependent variables discussed earlier and then answered several more scales and questions about themselves.

Civil Juror Litigation Crisis Attitudes:

Next, please indicate the level of agreement/disagreement that comes closest to your own response.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
There are far too many frivolous lawsuits today							
People are too quick to sue, rather than trying to solve disputes in some way							
The large number of lawsuits show that our society is breaking down							
The money awards that juries are awarding in civil cases are too large							
Most people who sue others in court have legitimate grievances							
By making it easier to sue, the courts have made this a safer society							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Juries do a good job of determining the outcomes of lawsuits and assessing damages							

Feelings toward Large Corporations:

How do you feel about large corporations?

I really do not like large corporations I do not like them I slightly dislike them Neutral I slightly like them I like them I really like large corporations

Feelings toward Small Businesses:

How do you feel about small businesses?

I really do not like small businesses I do not like them I slightly dislike them Neutral I slightly like them I like them I really like small businesses

Pro-/Anti-Business:

Would you consider yourself more pro- or anti-business?

Anti-business 2 3 Neutral 5 6 Pro-business

Pro-/Anti-Free Market:

Would you consider yourself more pro- or anti-free market?

Anti-free market 2 3 Neutral 5 6 Pro-free market

Then we had participants provide demographic information of themselves.

Sex:

Please indicate your sex.

- Male
- Female
- Non-binary

Marital Status:

Please indicate your marital status.

- Married
- Widowed
- Divorced
- Separated
- Never married

Age:

Please indicate your age.

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75-84
- 85 or older

Ethnicity:

Please indicate your ethnicity (check all that apply).

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Hispanic/Latino
- Other (please specify)

Education level:

Please indicate your highest level of completed education.

- Less than high school
- High school graduate
- Some college
- 2 year degree
- 4 year degree
- Professional degree
- Doctorate

What state they live in:

Which state do you live in?

Political Affiliation:

What is your political affiliation?

- Democrat
- Green
- Independent/Reform Party
- Republican
- Other (please specify)
- None

Political Ideology:

Where would you find yourself on a spectrum of political ideology?

Very liberal	2	3	Middle of the road	5	6	Very conservative
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Correlations between Lower Actor Responsibility, Blame, and Liability

	LoR1	LoB1	LoL1	LoR2	LoB2	LoL2	LoR3	LoB3	LoL3	LoR4	LoB4	LoL4
LowerResp1	1.00	0.85	0.75	0.24	0.23	0.19	0.55	0.57	0.53	0.51	0.52	0.50
LowerBlame1		1.00	0.83	0.26	0.26	0.20	0.55	0.57	0.52	0.51	0.53	0.49
LowerLiable1			1.00	0.24	0.24	0.20	0.49	0.50	0.55	0.44	0.49	0.49
LowerResp2				1.00	0.89	0.74	0.19	0.17	0.14	0.21	0.21	0.20
LowerBlame2					1.00	0.78	0.18	0.18	0.15	0.16	0.18	0.17
LowerLiable2						1.00	0.12	0.11	0.12	0.15	0.16	0.21
LowerResp3							1.00	0.88	0.78	0.52	0.52	0.50
LowerBlame3								1.00	0.81	0.48	0.50	0.49
LowerLiable3									1.00	0.46	0.48	0.54
LowerResp4										1.00	0.88	0.81
LowerBlame4											1.00	0.85
LowerLiable4												1.00

Correlations between Political Ideology, Pro-/Anti-Business, Pro-/Anti-Free Market, and Feelings toward Large Corporations – the variables examined in the creation of the Feelings toward Big Businesses variable.

	Political Ideology	P/A Business	P/A Free Market	Feelings towards Large Corp
Political Ideology	1.00	0.45	0.40	0.38
Pro-/Anti-Business		1.00	0.56	0.56
Pro-/Anti-Free Market			1.00	0.45
Large Corporations				1.00

Appendix D. Detailed write up of 5- and 6-way interactions involving Attributional Complexity as a moderator

The four-way interaction for Actor by Middle Manager Foreseeability by Middle Manager Choice by AC was further qualified by the inclusion of Middle Manager Sufficiency/Necessity, $\chi^2(2) = 10.90, p = .0043$, or Top Manager Sufficiency/Necessity, $\chi^2(2) = 12.29, p = .0021$. We will review the middle manager results first. In this interaction, for high AC individuals, there was one combination of conditions that resulted in the lower agent receiving significantly more culpability than the middle manager (see Figure D1a). Specifically, when the middle manager's actions were necessary, not foreseeable, and he didn't have a choice, the lower agent ($M = 5.76$) was held more culpable than the middle manager (when his actions were sufficient, he had no choice, and his actions were either foreseeable [$M = 4.98, p = .0035$] or not foreseeable [$M = 4.99, p = .0070$], or when his actions were necessary and he did not have foreseeability or choice [$M = 4.98, p = .0030$]). Low AC individuals had no significant differences (see Figure D1b).

For comparing individuals high and low in AC, there was one difference between these two groups. When the middle manager's actions were necessary, he did not have foreseeability, and he did not have a choice, individuals high in AC held the lower agent more culpable than their low AC counterparts (see Figure D1c). In this scenario, high AC individuals are placing increased culpability on the lower agent when the agent directly before him in the causal chain (the middle manager) had the elements that should contribute to the lowest possible culpability for the middle manager. There were no significant differences when the middle manager's actions were sufficient (see Figure D1d).

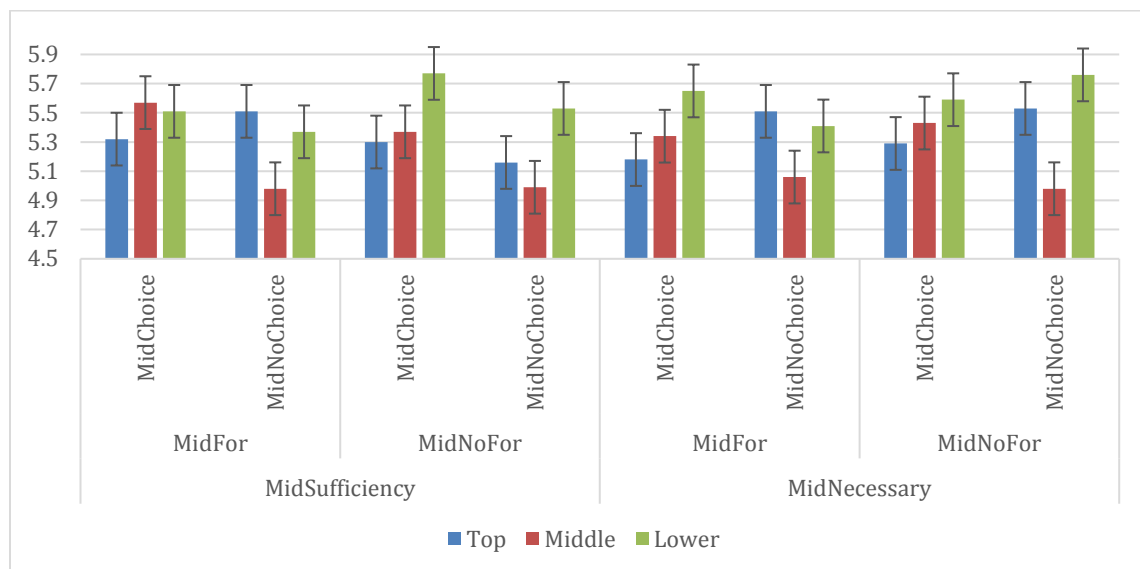


Figure D1a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – high Attributional Complexity participants.

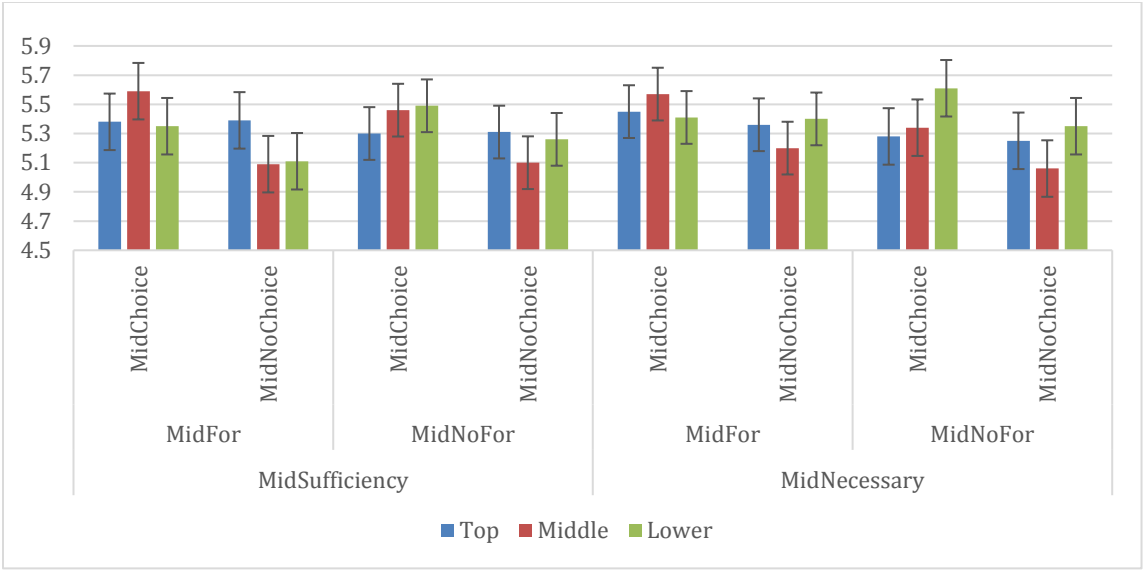


Figure D1b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – low Attributional Complexity participants.

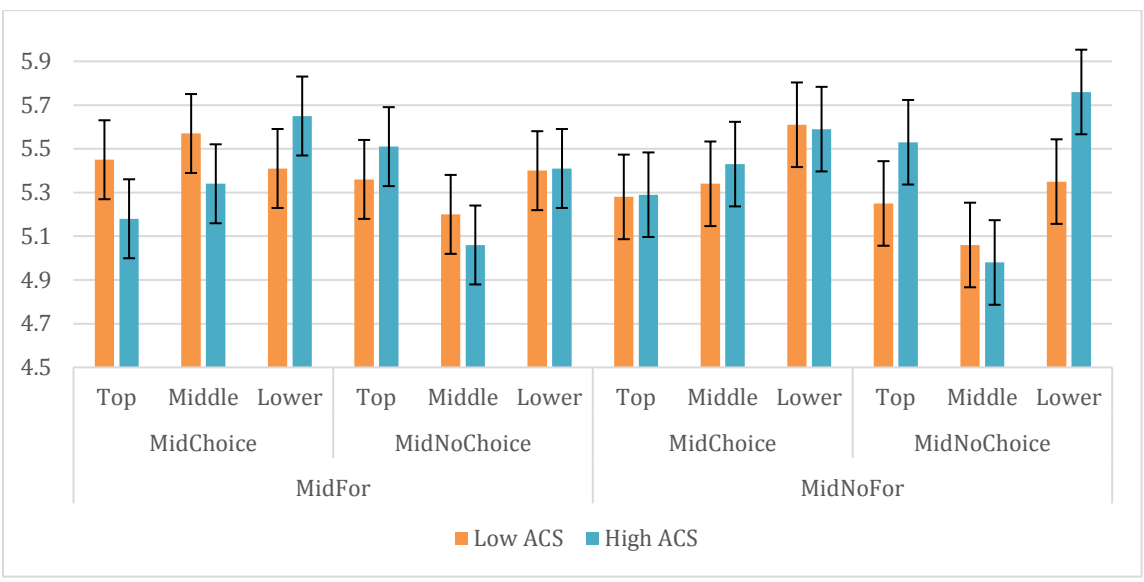


Figure D1c. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – examining high and low Attributional Complexity individuals in the conditions where the Middle Manager’s actions were necessary.

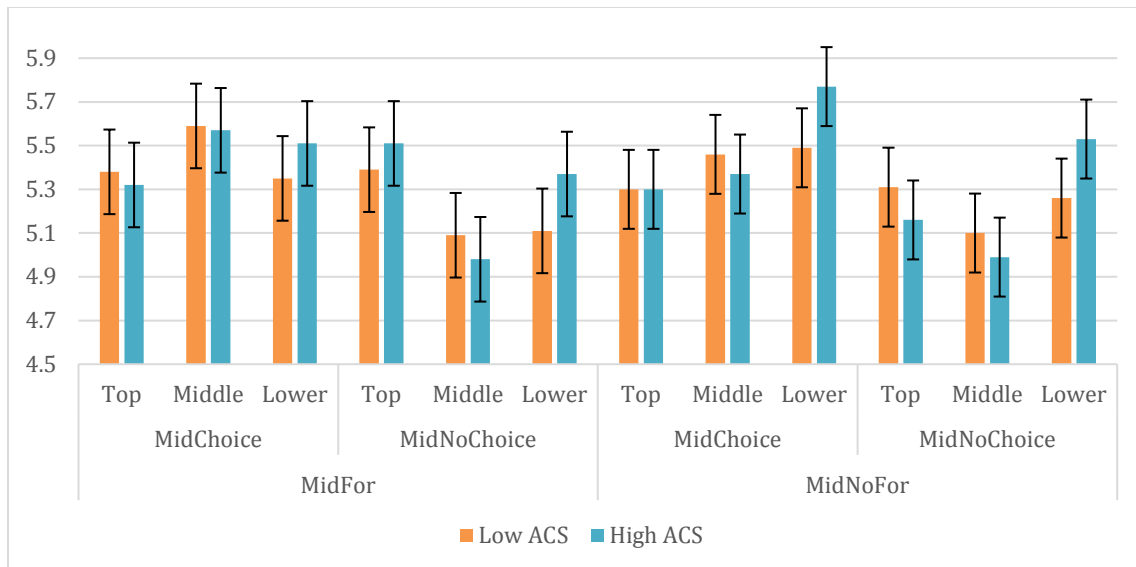


Figure D1d. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – examining high and low Attributional Complexity individuals in the conditions where the Middle Manager’s actions were sufficient.

There were many more findings for the Top Manager Sufficiency/Necessity model, although there were still only three specific conditions that drove these findings (see Figure D2a). The conditions were for the 1) middle manager when the top manager’s actions were sufficient and the middle manager had foreseeability and no choice ($M = 4.73$), 2) middle manager when the top manager’s actions were sufficient and the middle manager did not have foreseeability and had no choice ($M = 4.85$), and 3) top manager when his actions were necessary and the middle manager did not have foreseeability but had a choice ($M = 5.05$). Each of these conditions resulted in significantly lower culpability when compared to certain other scenarios.

First, we will examine the middle manager (when the top manager’s actions were sufficient and the middle manager had foreseeability and no choice) compared to the top manager. The middle manager was held less culpable than the top manager in several situations. First, when the top manager’s actions were sufficient and the middle manager did not have foreseeability the top manager was held more culpable (regardless of Middle Manager Choice, $M_{\text{Choice}} = 5.54$, $p = .0127$; $M_{\text{NoChoice}} = 5.48$, $p = .0065$). Second, when the middle manager had foreseeability and did not have a choice the top manager was held more culpable (regardless of Top Manager Sufficiency/Necessity, $M_{\text{Suf}} = 5.56$, $p = .0005$; $M_{\text{Nec}} = 5.46$, $p = .0128$). In these conditions, we saw that the impact of Top Manager Sufficiency on middle manager culpability had a greater impact than Middle Manager Foreseeability. Conversely, Top Manager Sufficiency appeared to have a greater impact on top manager culpability.

Next, we will examine the middle manager (when the top manager’s actions were sufficient and the middle manager had foreseeability and no choice) compared to the lower agent. The middle manager was held significantly less culpable than the lower agent in several situations. First, when the top manager’s actions were necessary the

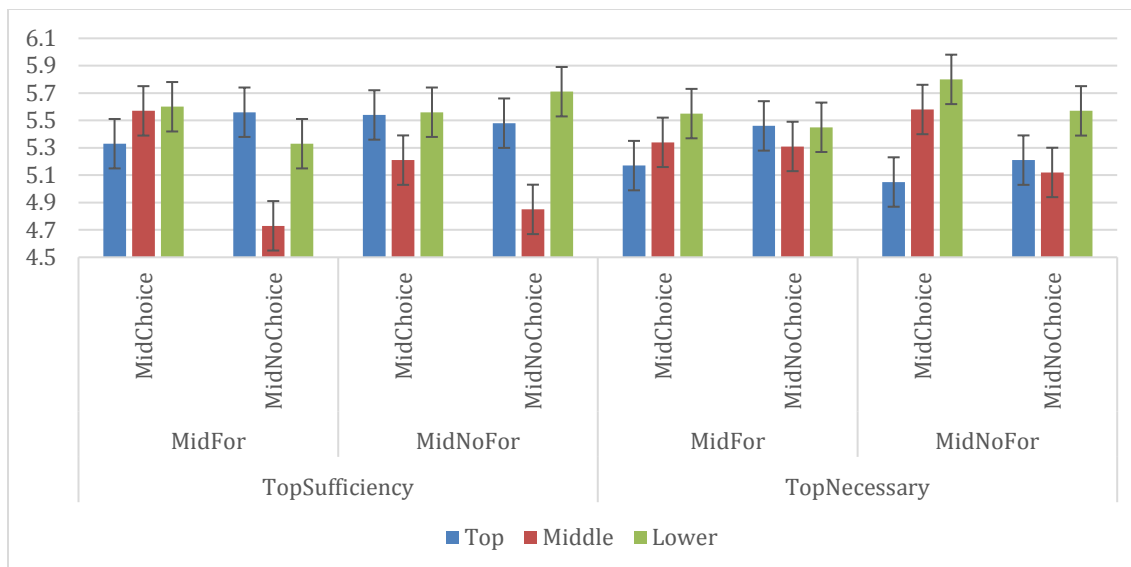


Figure D2a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – high Attributional Complexity participants.

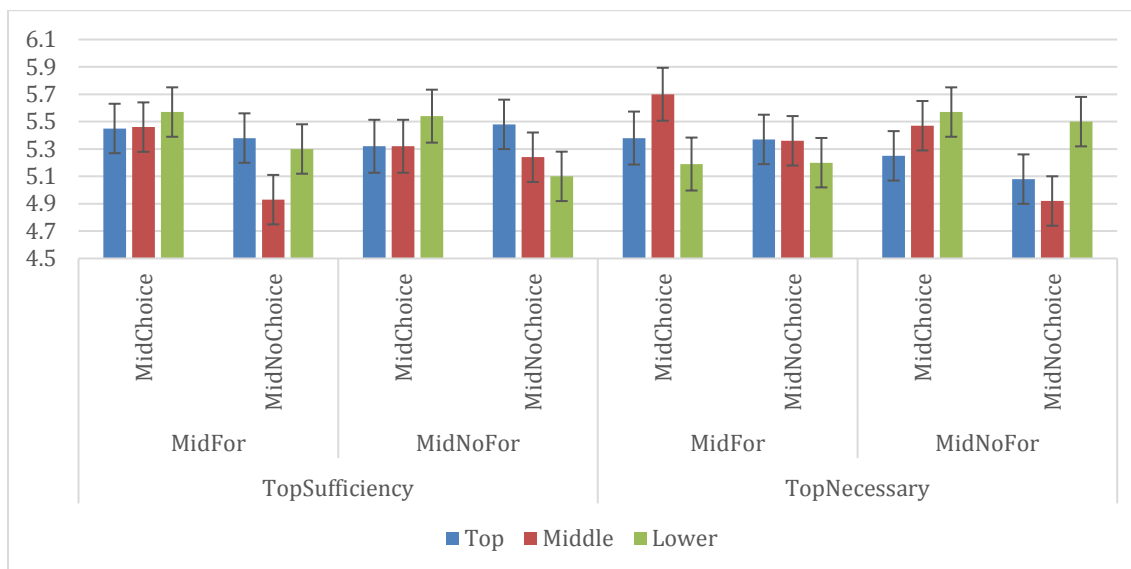


Figure D2b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – low Attributional Complexity participants.

lower agent was more culpable (regardless of Middle Manager Foreseeability and Middle Manager Choice, $M_{\text{For/NoChoice}} = 5.45$, $p = .0147$; $M_{\text{For/Choice}} = 5.55$, $p = .0095$; $M_{\text{NoFor/NoChoice}} = 5.57$, $p = .0004$; $M_{\text{NoFor/Choice}} = 5.80$, $p < .0001$). Second, when the top manager's actions were sufficient and the middle manager had no foreseeability the lower agent was more culpable (regardless of Middle Manager Choice, $M_{\text{NoChoice}} = 5.71$, $p < .0001$; $M_{\text{Choice}} = 5.56$, $p = .0079$). Third, when the top manager's actions were sufficient

and the middle manager had foreseeability and a choice the lower agent was again more culpable ($M = 5.60, p = .0024$). These findings indicated that the actions of the top manager, primarily, impacted the lower agent's culpability. When the agent that started the causal chain did not force the next agent to act, the agent at the end of the chain was held more culpable. However, even when the actions of the agents preceding the lower agent should have mitigated his culpability, he was still found very culpable. This indicated that high AC individuals still emphasize proximity to the wrongdoing when determining culpability.

Finally, we will examine the middle manager (when the top manager's actions were sufficient and the middle manager had foreseeability and no choice) compared to himself in other scenarios. First, the middle manager was more culpable when his actions were foreseeable, he had a choice, and the top manager's actions were sufficient ($M = 5.57, p = .0049$). Second, the middle manager was more culpable when his actions were not foreseeable, he had a choice, and the top manager's actions were necessary ($M = 5.58, p = .0038$). These results showed that Middle Manager Choice was the consistent variable that resulted in the middle manager being more culpable. If the middle manager had a choice, he was held more culpable. Individuals low in AC did not have any significant differences (see Figure D2b).

For the second condition that resulted in significantly lower culpability, the middle manager (when he did not have foreseeability or a choice, and the top manager's actions were sufficient) was deemed less culpable than the lower agent, when the middle manager did not have foreseeability or a choice (regardless of Top Manager Sufficiency/Necessity, $M_{\text{Suf}} = 5.71, p = .0003$; $M_{\text{Nec}} = 5.57, p = .0140$). The middle manager was also less culpable than the lower agent when the top manager's actions were necessary and the middle manager had a choice but did not have foreseeability ($M = 5.80, p = .0005$).

For the third condition that resulted in significantly lower culpability, the top manager (when his actions were necessary and the middle manager did not have foreseeability but did have a choice, $M = 5.05$) was held less culpable than the lower agent under the same scenario ($M = 5.80, p = .0030$). At low levels of ACS, there were no significant differences.

There was also a significant Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by ACS interaction, $\chi^2(2) = 10.75, p = .0046$. For individuals high in AC, there were two conditions that resulted in the middle manager being held less culpable than the lower agent and top managers. The middle manager was less culpable when the top manager's actions were sufficient and the top manager had foreseeability (regardless of Middle Manager Foreseeability, $M_{\text{For}} = 4.95, M_{\text{NoFor}} = 4.94$). In other words, when the top manager predetermined the action of the middle manager and knew that there could be a negative outcome, the middle manager was less culpable (regardless of his knowledge about a potentially negative outcome).

For the first condition, the middle manager was less culpable than the top manager when the top manager's actions were sufficient, the top manager had foreseeability, and the middle manager did not have foreseeability ($M = 5.67, p = .0072$). This is a logical finding, as this combination of conditions should result in increased top

manager culpability. The middle manager was also less culpable than the lower agent when both the upper and middle managers did not have foreseeability (regardless of Top Manager Sufficiency/Necessity, $M_{\text{Suf}} = 5.73$, $p = .0053$; $M_{\text{Nec}} = 5.72$, $p = .0015$). Again, this is as we expected – when those earlier in the causal chain did not have foreseeability, the person at the end of the chain (the lower agent) is more culpable. The findings for the second condition were identical to the first condition ($M = 5.67$, $p = .0037$; $M_{\text{Suf}} = 5.73$, $p = .0042$; $M_{\text{Nec}} = 5.72$, $p = .0012$; respectively). For individuals low in AC, there were no significant findings.

There was also an Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by ACS interaction, $\chi^2(2) = 13.52$, $p = .0012$. For this interaction there were two conditions that resulted in significantly lower culpability for high AC individuals when compared to other conditions: 1) the middle manager when his actions *were not* foreseeable and neither he nor the top manager had a choice ($M = 4.77$) and 2) the middle manager when his actions *were* foreseeable and neither he nor the top manager had a choice ($M = 4.66$). These results suggested that high AC individuals were prioritizing choice over foreseeability. If the upper and middle managers did not have a choice, Middle Manager Foreseeability did not matter, the middle manager would be seen as less culpable.

When examining the first condition, there were several scenarios in which the lower agent was held more culpable than the middle manager. First, the lower agent was more culpable when the middle manager did not have foreseeability or a choice (regardless of Top Manager Choice, $M_{\text{NoChoice}} = 5.58$, $p = .0023$; $M_{\text{Choice}} = 5.70$, $p = .0049$). Second, the lower agent was held more culpable when the middle manager did not have foreseeability but did have a choice, and the top manager did not have a choice ($M = 5.78$, $p = .0013$).

When examining the second condition, all the same findings from the first condition remained ($p = .0002$; $p = .0006$; $p = .0001$, respectively), in addition to several other findings. First, the lower agent was held more culpable when the middle manager had foreseeability and the top manager had no choice (regardless of Middle Manager Choice, $M_{\text{NoChoice}} = 5.43$, $p = .0079$; $M_{\text{Choice}} = 5.56$, $p = .0106$). Second, the lower agent was held more culpable when both the upper and middle managers had a choice (regardless of Middle Manager Foreseeability, $M_{\text{For}} = 5.60$, $p = .0087$; $M_{\text{NoFor}} = 5.59$, $p = .0096$). Third, the top manager was found more culpable when the middle manager did not have foreseeability or a choice, and the top manager also did not have a choice ($M = 5.41$, $p = .0101$). Finally, the top manager was also more culpable when the middle manager had foreseeability but did not have a choice, and the top manager did have a choice ($M = 5.63$, $p = .0027$). These findings again suggest that high AC individuals are focusing more so on proximity when it comes to lower agent culpability. Individuals low in AC did not have any significant findings.

For comparing individuals high and low in AC, there was one scenario that had differences between these two groups. When the top manager's actions were sufficient and the middle manager did not have foreseeability or a choice, individuals high in AC see these conditions are exculpatory for the middle manager and inculpatory for the lower agent. Individuals low in AC, on the other hand, did not find these two agents significantly different in terms of culpability (see Figure D2c). There were no significant

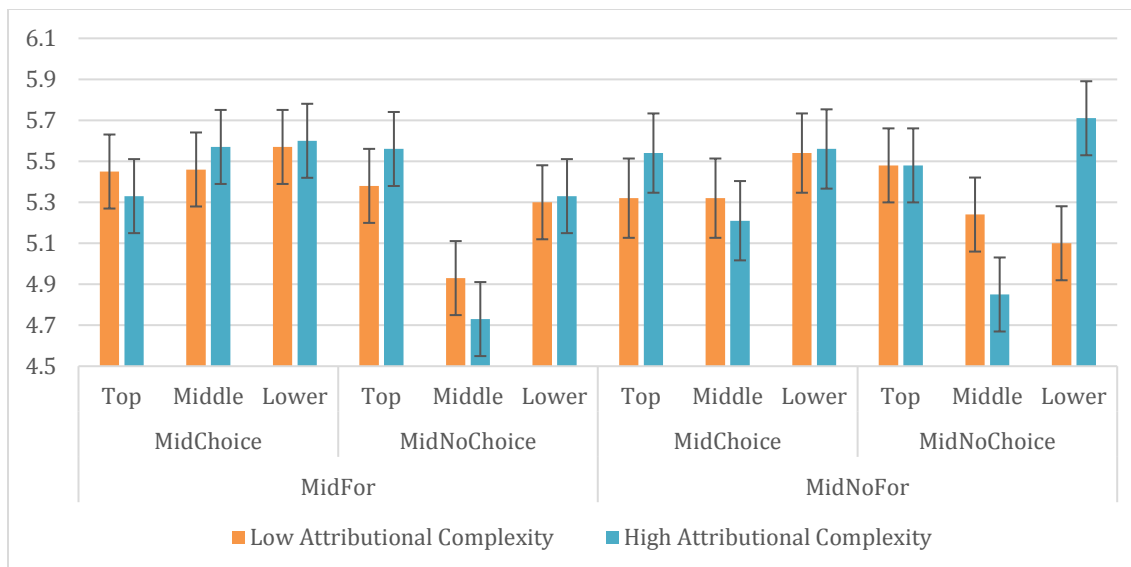


Figure D2c. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – examining high and low Attributional Complexity individuals in the conditions where the Top Manager’s actions were sufficient.

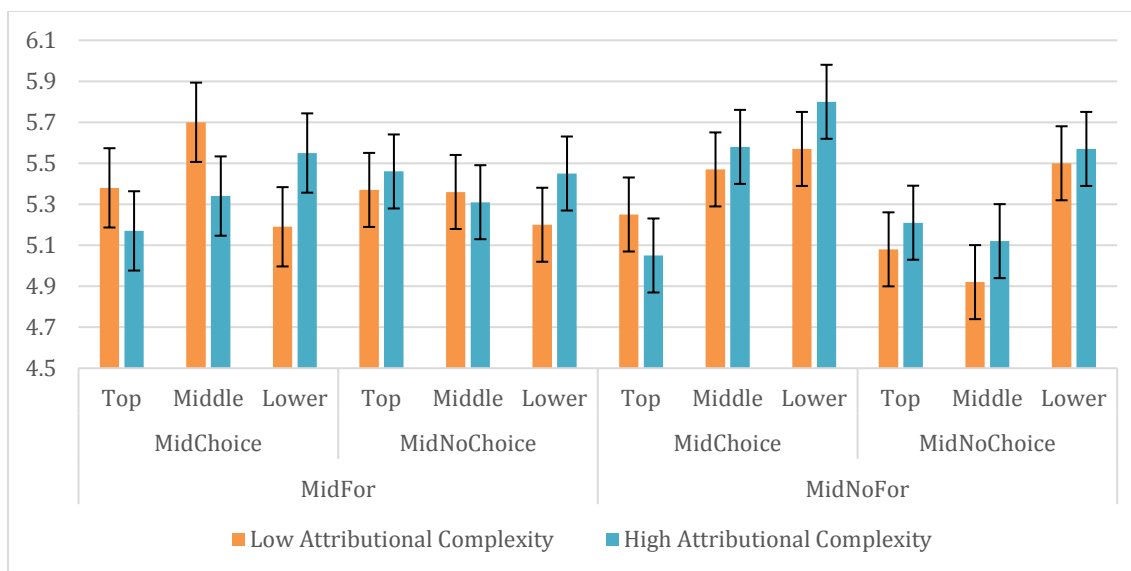


Figure D2d. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Attributional Complexity 5-way interaction – examining high and low Attributional Complexity individuals in the conditions where the Top Manager’s actions were necessary.

differences when the top manager’s actions were necessary (see Figure D2d).

There were two six-way interactions that built upon previous five-way interactions. First, there was a significant Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Middle Manager

Choice by ACS interaction, $\chi^2(2) = 12.69, p = .0018$. This interaction can best be thought of as the combining of the Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by ACS and the Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by ACS interactions discussed above.

The results indicated that the combining of these two interactions results in a combined effect for the main conditions that drove the findings for high AC individuals. There were three conditions that drove the results in the combined interaction that also drove results for the two individual interactions. First, the middle manager had low culpability when he had foreseeability but no choice, and the top manager's actions were sufficient and he had foreseeability ($M = 4.33$). This mean was lower than the means for the two individual interactions ($M_{LoChoice} = 4.73; M_{UpFor} = 4.95$). Second, the middle manager had low culpability when he did not have foreseeability or a choice, and the top manager's actions were sufficient and he had foreseeability ($M = 4.75$). Again, this was lower than the means for the two individual interactions ($M_{LoChoice} = 4.85; M_{UpFor} = 4.94$). Third, the lower agent had high culpability when the middle manager did not have foreseeability but did have a choice, and the top manager's actions were necessary and not foreseeable ($M = 5.94$). This was higher than the means for the two individual interactions ($M_{LoChoice} = 5.80; M_{UpFor} = 5.72$). So again, the results show that when these two interactions were combined, the significantly low and high culpability scenarios grew even more extreme. There were no significant differences for low AC individuals.

The other significant six-way interaction was for Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by ACS, $\chi^2(2) = 10.11, p = .0064$. This interaction is best thought of as the addition of Top Manager Choice to the earlier discussed five-way interaction containing the other variables. There were four conditions that drove the results for this, and the five-way, interaction. We will describe the condition and then discuss the impact of Top Manager Choice on the results.

First, for the five-way interaction, the middle manager was held less culpable when his actions were sufficient, he had no foreseeability, and no choice ($M = 4.99$). For this condition, Top Manager Choice did not have a large impact ($M_{NoChoice} = 5.03; M_{Choice} = 4.96$). Second, the middle manager was held less culpable when his actions were sufficient, he had foreseeability, and no choice ($M = 4.98$). The top manager having no choice further decreased the middle manager's culpability ($M = 4.44$), whereas the top manager having a choice increased the middle manager's culpability ($M = 5.51$). This finding was unexpected, because the top manager having a choice and the middle manager not having a choice, should result in less culpability for the middle manager, not more. Third, the middle manager was held less culpable when his actions were necessary, he had no foreseeability, and no choice ($M = 4.98$). The top manager having no choice further decreased the middle manager's culpability ($M = 4.52$), whereas the top manager having a choice increased the middle manager's culpability ($M = 5.43$). These results followed the same pattern as when the middle manager's actions were sufficient and he had foreseeability.

Finally, the lower agent was held more culpable when the middle manager's actions were necessary, he had no foreseeability, and no choice ($M = 5.76$). Top Manager

Choice may have had a slight impact on the lower agent. When the top manager had no choice ($M = 5.70$), the lower agent's culpability went down slightly. And when the top manager had a choice ($M = 5.81$), the lower agent's culpability went up slightly. There was less variation for the lower agent than there was for the middle manager. This again suggests that it is the middle manager (i.e., the individual in the middle of the chain) that has the largest swings in culpability based on manipulation of conditions and he is greatly impacted by the actions of the top manager.

Appendix E. Detailed write up of 5-, 6-, and 7-way interactions involving Political Ideology as a moderator

The Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology interaction was further qualified by Top Manager Sufficiency/Necessity, $\chi^2(2) = 20.65, p < .0001$. For conservatives, there were two conditions that resulted in the lower agent being held more culpable than the upper and middle managers in certain scenarios (see Figure E1a). First, the lower agent (when both the upper and middle manager's actions were sufficient and the middle manager did not have foreseeability, $M = 5.77$) was more culpable than the top manager (when the top manager's actions were necessary, the middle manager's actions were sufficient, and the middle manager did not have foreseeability, $M = 4.97, p = .0040$). In this set of conditions, the lower agent is being held more culpable when both the upper and middle managers predetermined the actions of the agent following them in the causal chain (i.e., the middle manager predetermined the actions of the lower agent), which would indicate that conservatives are emphasizing the importance of foreseeability for the middle manager. Since the middle manager did not have foreseeability, the lower agent was still held more culpable.

Second, the lower agent (when both the upper and middle manager's actions were necessary and the middle manager did not have foreseeability, $M = 5.94$) was more culpable than the top manager (when the top manager's actions were necessary and the middle manager did not have foreseeability, regardless of Middle Manager Sufficiency/Necessity, $M_{\text{Sufficient}} = 4.97, p < .0001$; $M_{\text{Necessary}} = 5.12, p = .0007$). This is a finding we would expect based on theory. The lower agent was also more culpable than the middle manager (when the top manager's actions were sufficient and the middle

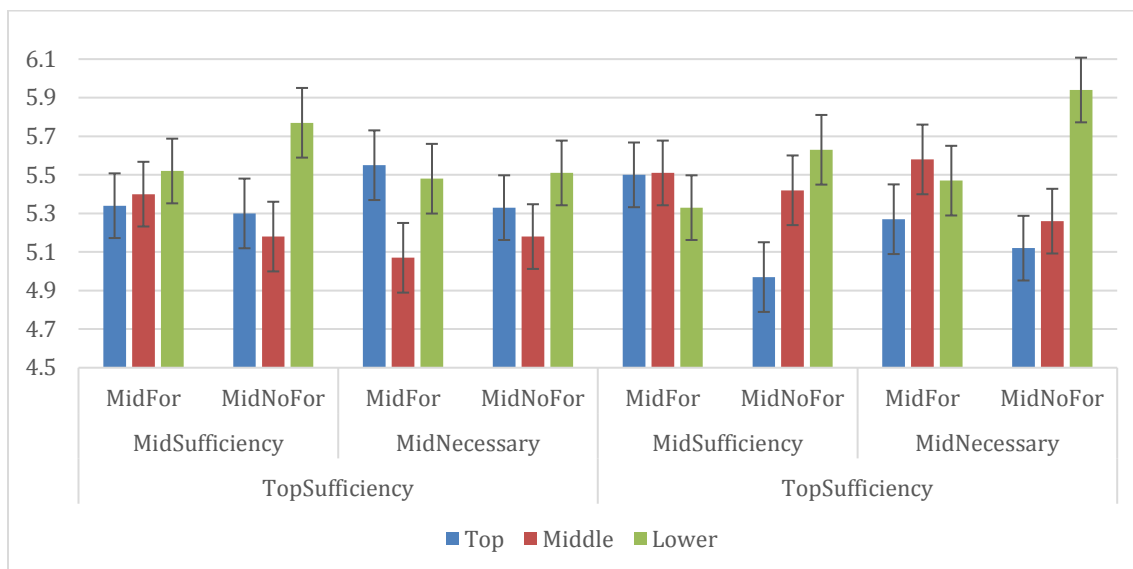


Figure E1a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology 5-way interaction – conservative participants.

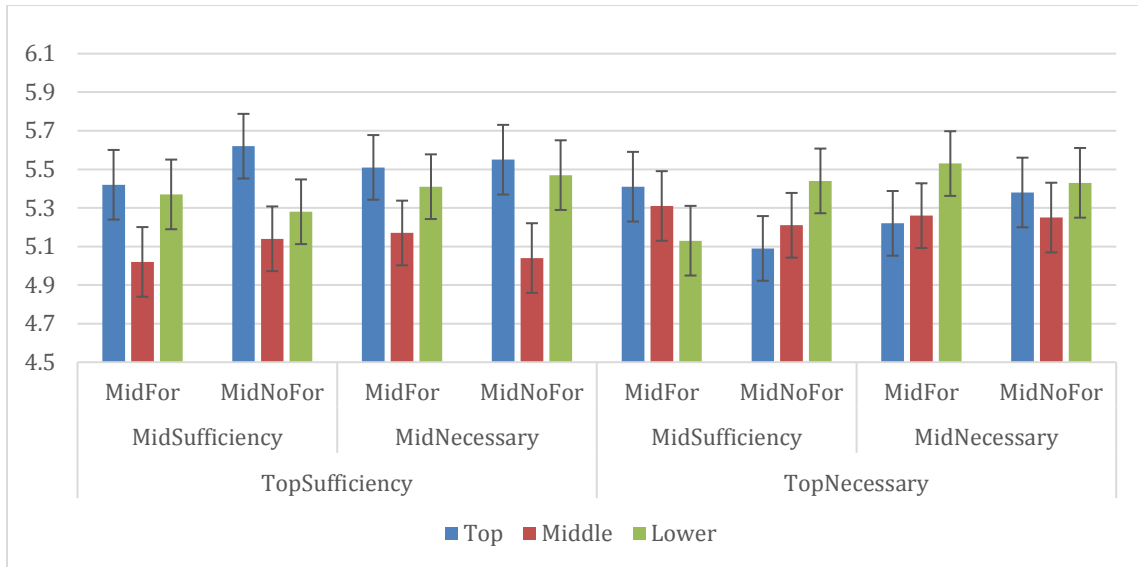


Figure E1b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology 5-way interaction – liberal participants.

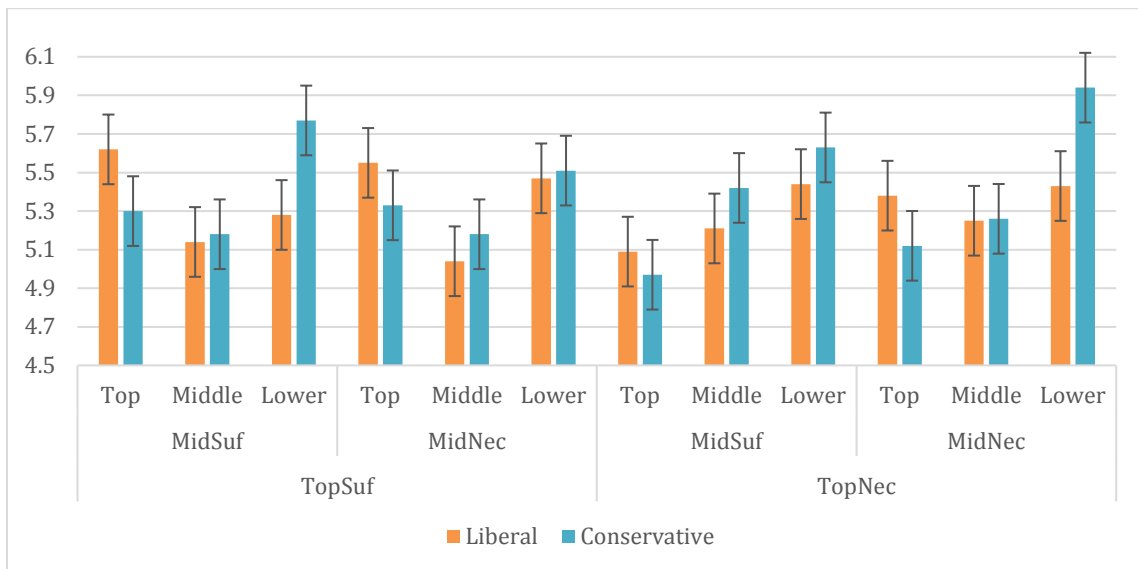


Figure E1c. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had no foreseeability.

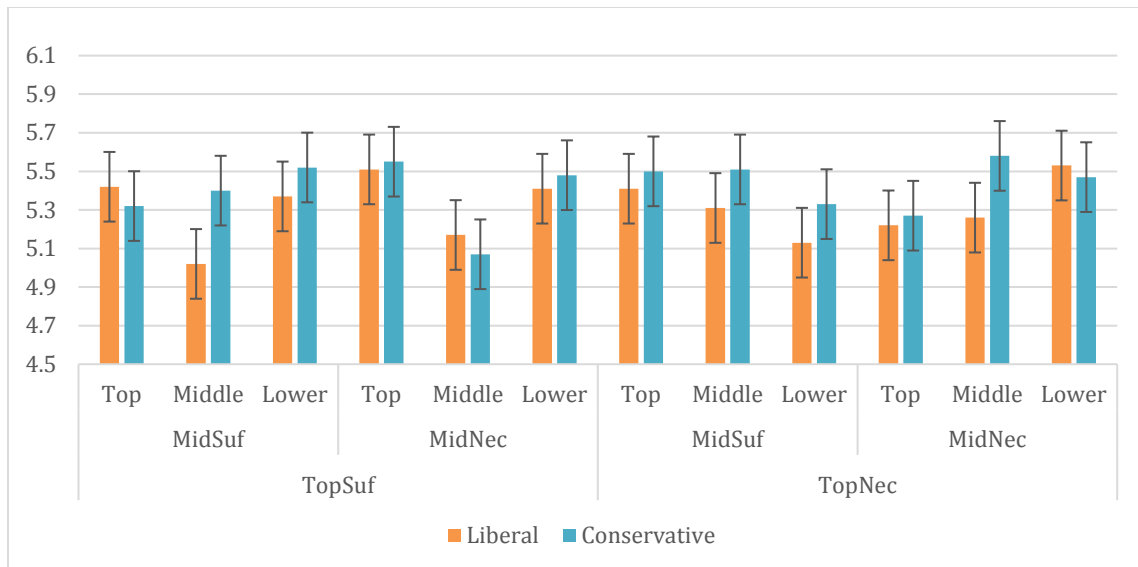


Figure E1d. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had foreseeability.

manager's actions were necessary, regardless of Middle Manager Foreseeability, $M_{\text{For}} = 5.07$, $p = .0006$; $M_{\text{NoFor}} = 5.18$, $p = .0047$). There were no significant differences for liberals (see Figure E1b).

When comparing more liberal and conservative individuals, there were two conditions when the middle manager did not have foreseeability that resulted in conservatives having significantly higher levels of culpability for the lower agent when compared to liberals (see Figure E1c). These conditions were, 1) when the upper and middle manager's actions were sufficient, and 2) when the upper and middle manager's actions were necessary. There were no significant differences when the middle manager did have foreseeability (see Figure E1d).

The Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology interaction was further qualified by Top Manager Foreseeability, $\chi^2(2) = 9.85$, $p = .0073$. Upon examination of the results, however, there were no significant differences within either the more conservative or more liberal groups (see Figures E2a and E2b).

When comparing more liberal and conservative individuals, there were two conditions that resulted significant differences. First, conservatives held the middle manager more culpable than their liberal counterparts when the top manager had foreseeability and the middle manager's actions were sufficient and foreseeable (see Figure E2c). It appeared that in this situation, conservatives were placing more emphasis on the actions of the middle manager himself, whereas liberals were placing more emphasis on the actions of the top manager (which mitigated the culpability of the middle manager). Second, in the same scenario, but now the middle manager does not have foreseeability, then it was with the lower agent that the differences were found (See Figure E2d). Conservatives held the lower agent more culpable than their liberal

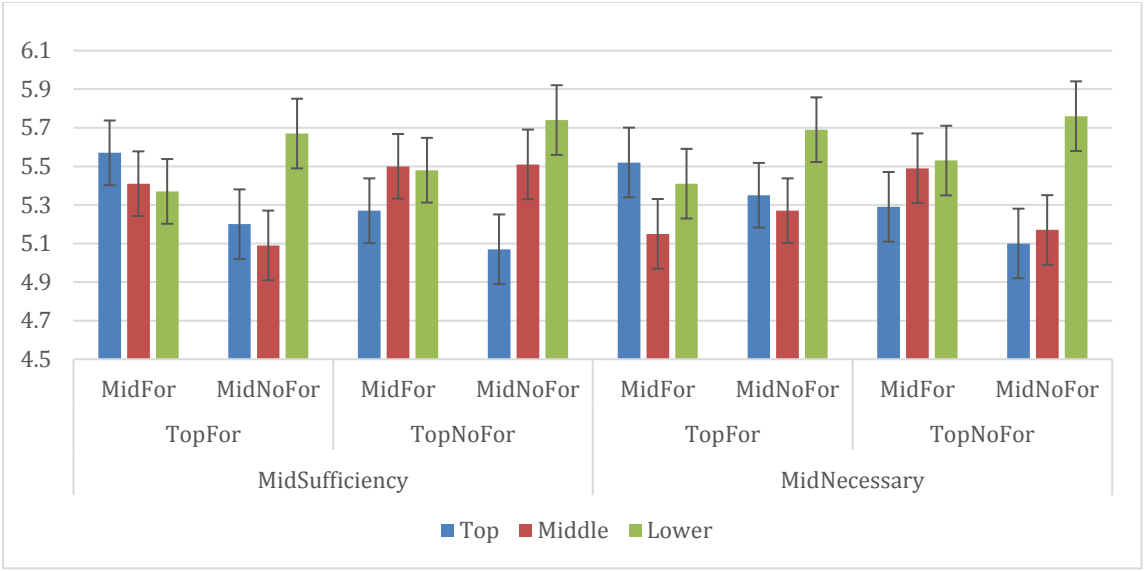


Figure E2a. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Political Ideology 5-way interaction – conservative participants.

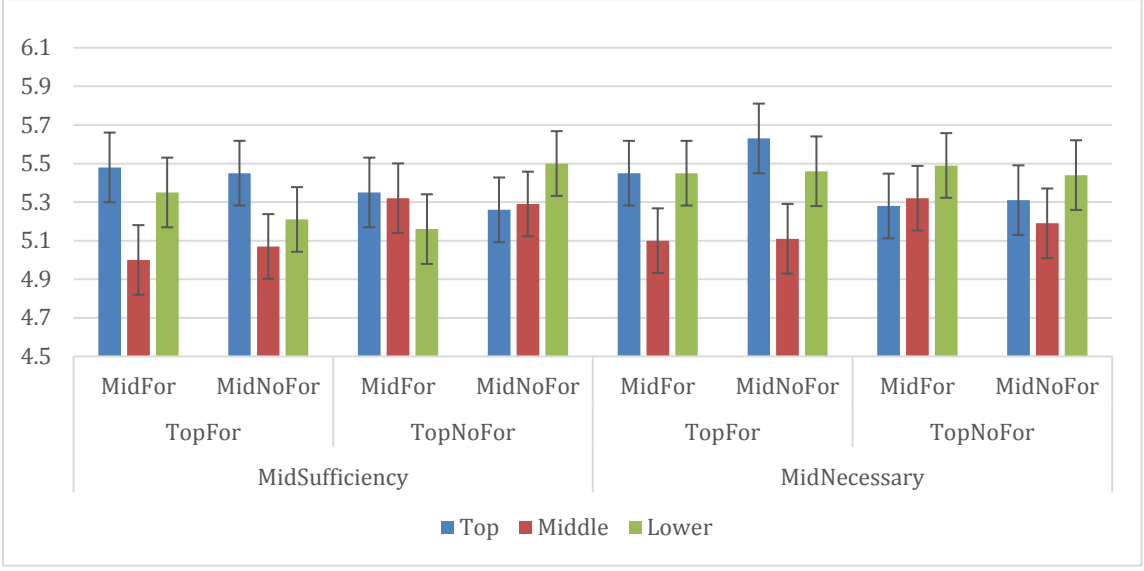


Figure E2b. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Political Ideology 5-way interaction – liberal participants.

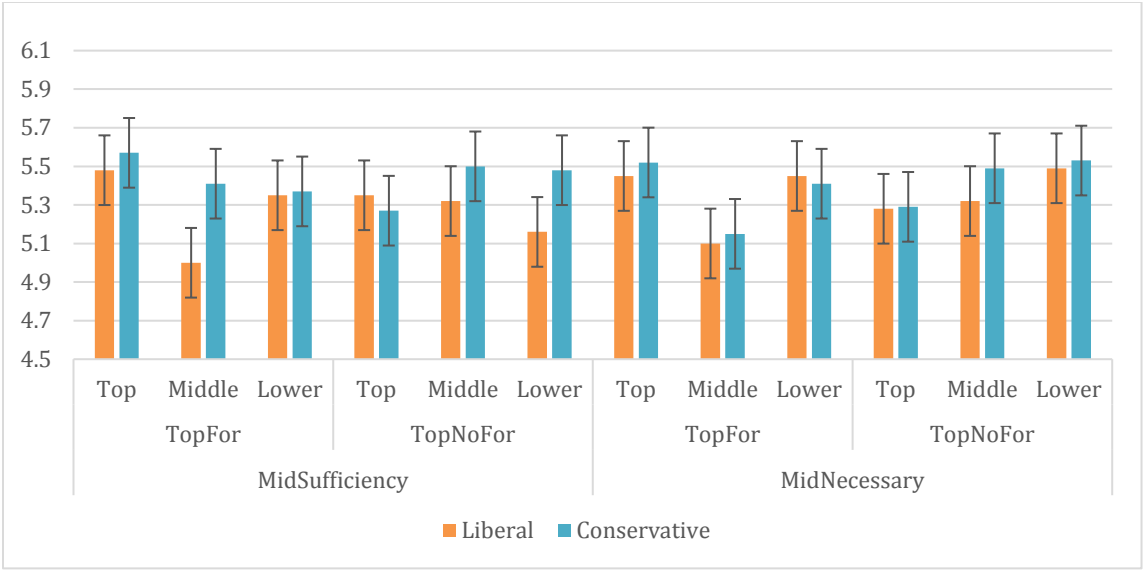


Figure E2c. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had foreseeability.

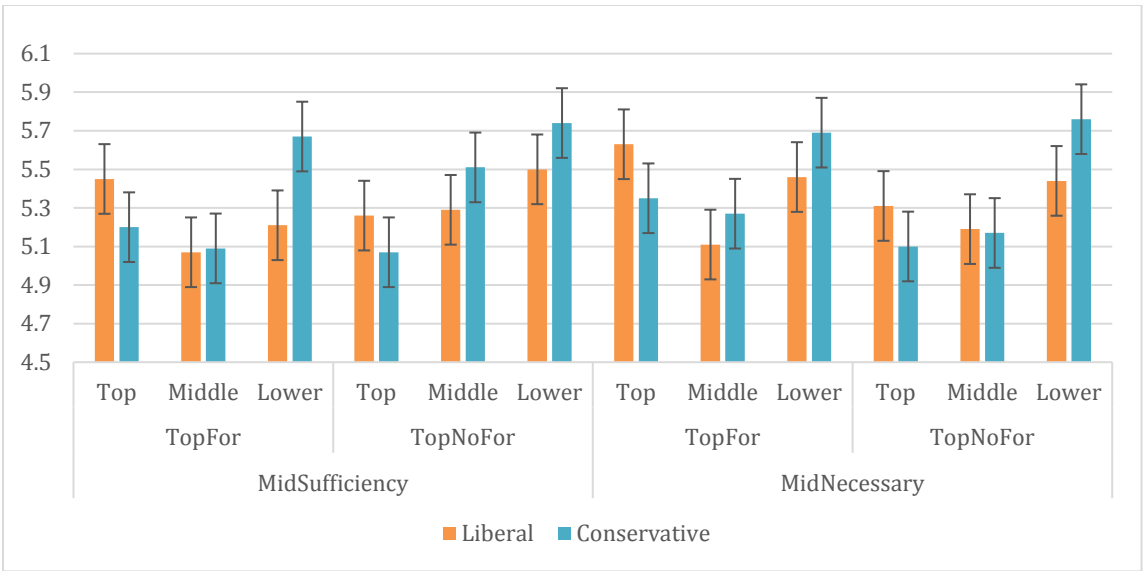


Figure E2d. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had no foreseeability.

counterparts.

The Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology interaction was further qualified by Top Manager Choice, $\chi^2(2) = 18.14, p = .0001$. For conservatives, there were three different conditions

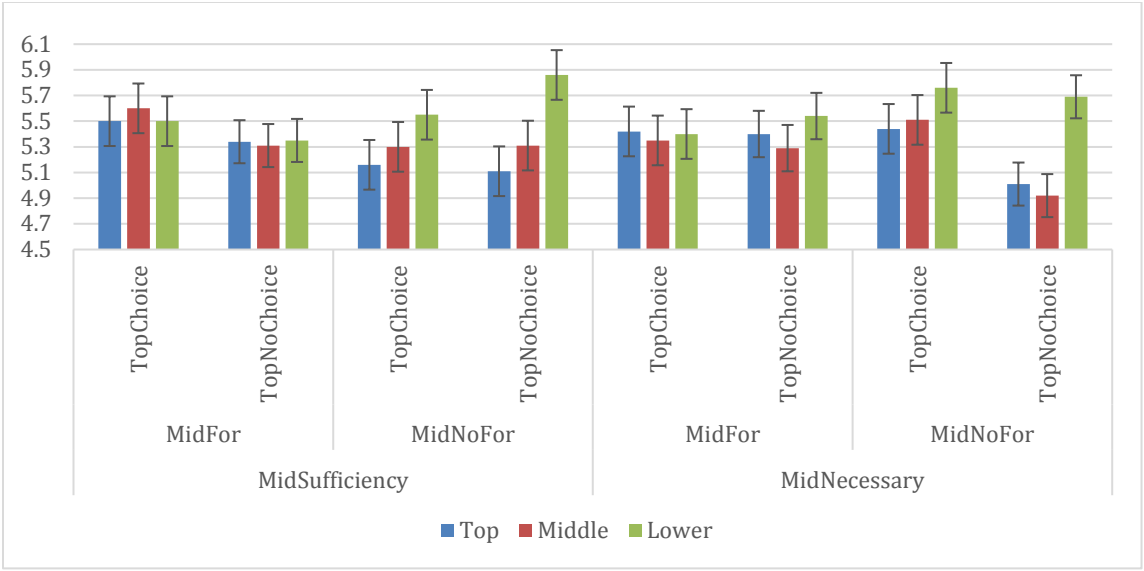


Figure E3a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology 5-way interaction – conservative participants.

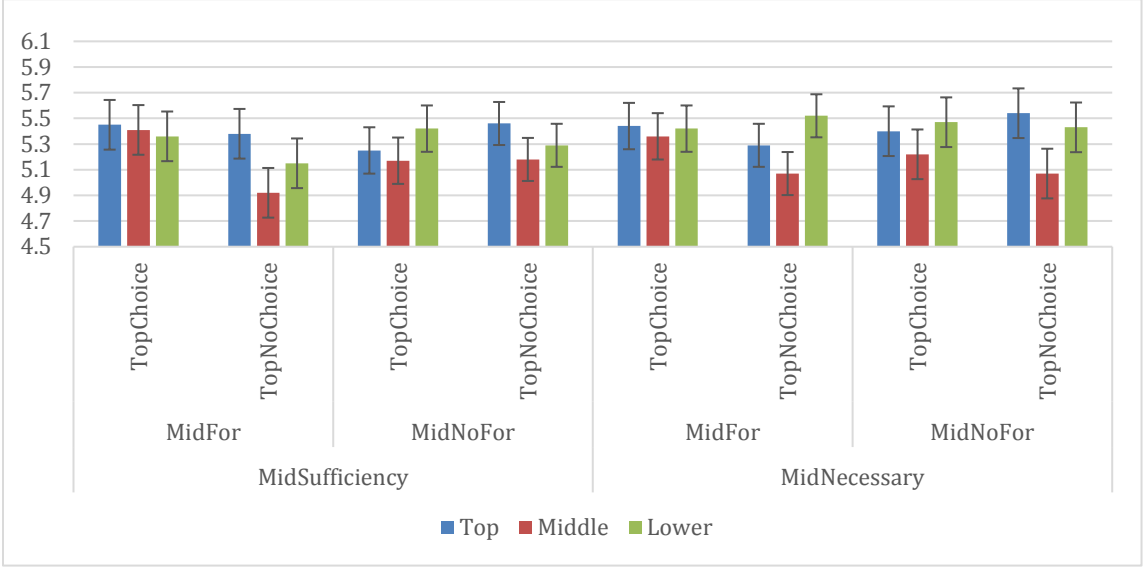


Figure E3b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology 5-way interaction – liberal participants.

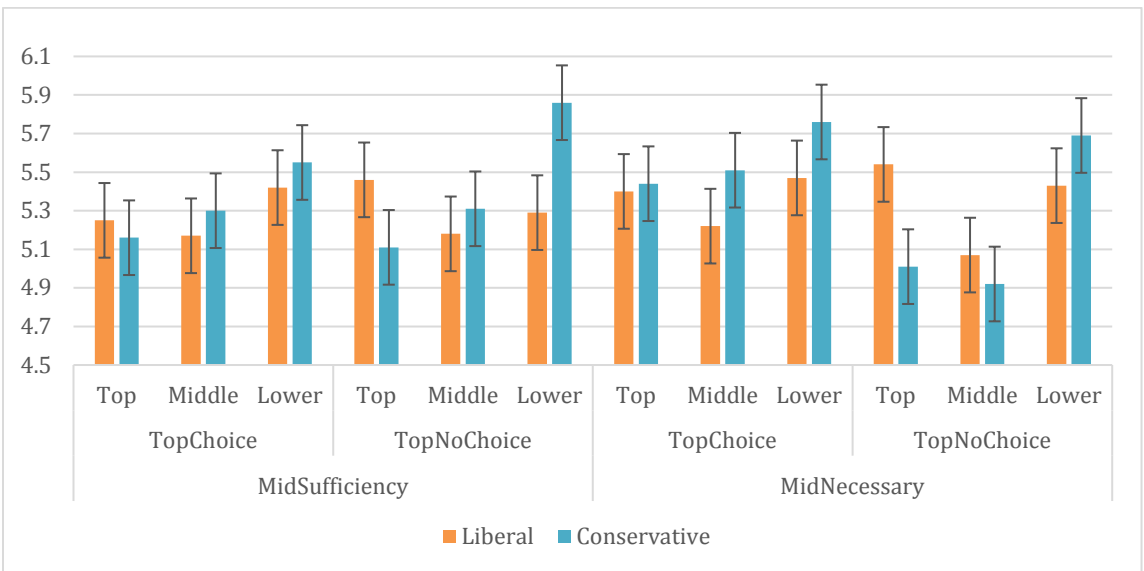


Figure E3c. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had no foreseeability.

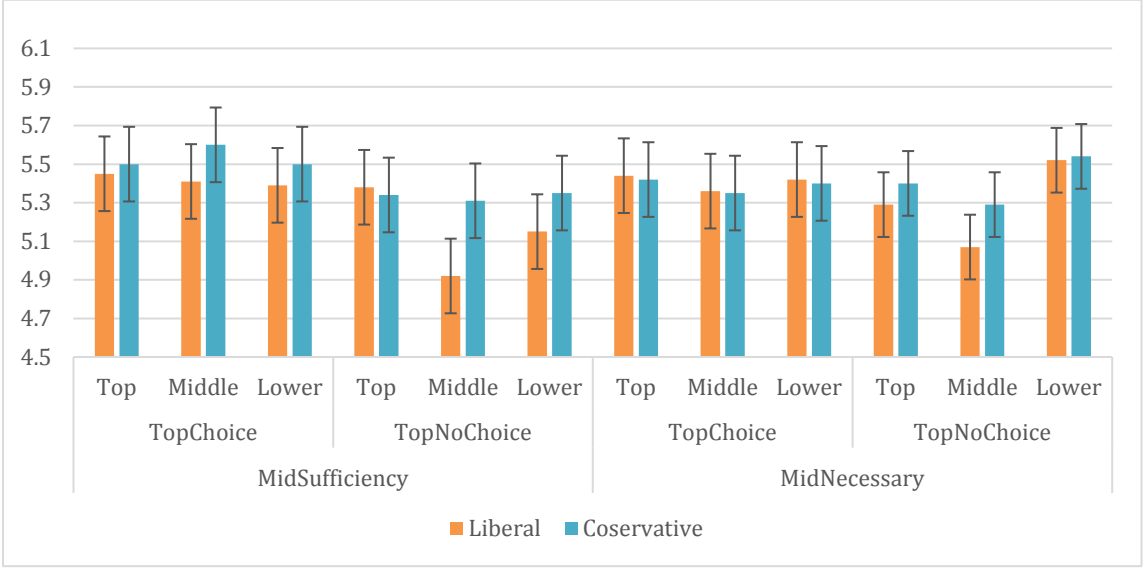


Figure E3d. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had foreseeability.

that resulted in lower agent receiving more culpability than the upper and middle managers in certain scenarios (see Figure E3a). First, the lower agent (when the middle manager’s actions were sufficient and not foreseeable, and the top manager had no

choice, $M = 5.86$) was more culpable than the top manager in the same condition ($M = 5.11$), $p = .0097$. The lower agent was also more culpable than both the upper and middle managers when the middle manager's actions were necessary and not foreseeable, and the top manager did not have a choice ($M_{\text{Top}} = 5.01$, $p = .0007$; $M_{\text{Middle}} = 4.92$, $p < .0001$). In other words, conservatives are finding the lower agent more culpable even when his actions were predetermined by the middle manager.

Second, the lower agent (when the middle manager's actions were necessary and not foreseeable, and the top manager did not have a choice, $M = 5.69$) was more culpable than both the upper and middle managers when the middle manager's actions were necessary and not foreseeable, and the top manager did not have a choice ($M_{\text{Top}} = 5.01$, $p = .0066$; $M_{\text{Middle}} = 4.92$, $p = .0005$ – these results are identical, although less significant, to those in the previous paragraph).

Finally, the lower agent (when the middle manager's actions were necessary and not foreseeable, and the top manager did have a choice, $M = 5.76$) was more culpable than the middle manager (when his actions were necessary and not foreseeable, and the top manager did not have a choice, $M = 4.92$, $p = .0054$). For liberals, there were no significant differences (see Figure E3b).

When comparing more liberal and conservative individuals, there was one condition that resulted significant differences for when the middle manager did not have foreseeability (see Figure E3c). When the top manager did not have a choice and the middle manager's actions were sufficient and not foreseeable, conservatives held the lower agent significantly more culpable than liberals. There were no significant differences when the middle manager had foreseeability (see Figure E3d).

The Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology interaction was further qualified by Middle Manager Choice, $\chi^2(2) = 16.36$, $p = .0002$. For conservatives, the lower agent (when the middle manager's actions were necessary, not foreseeable, and he had a choice, $M = 5.81$) was

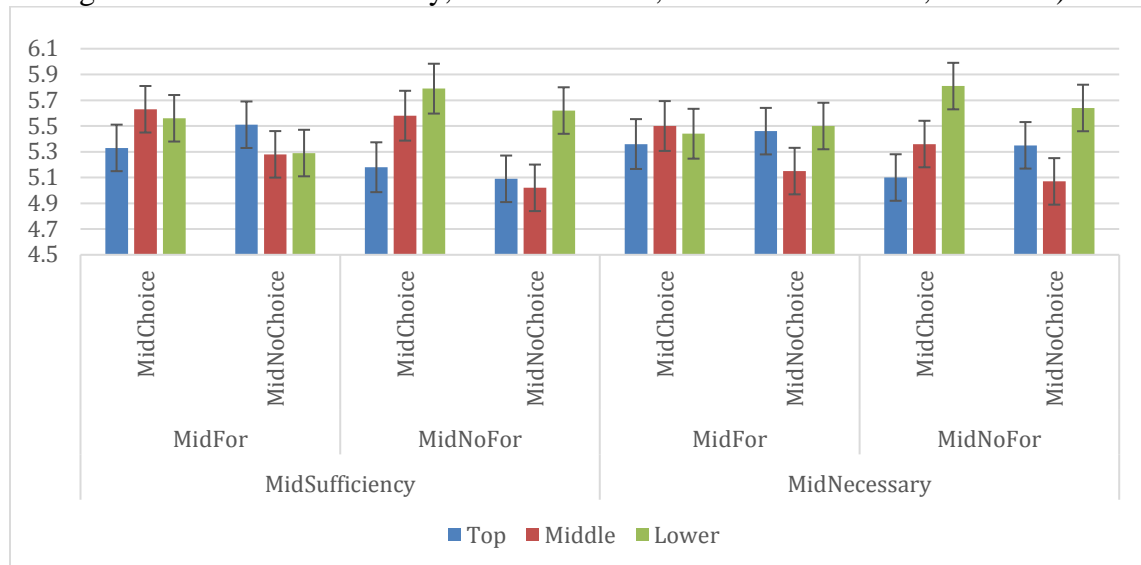


Figure E4a. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Political Ideology 5-way interaction – conservative participants.

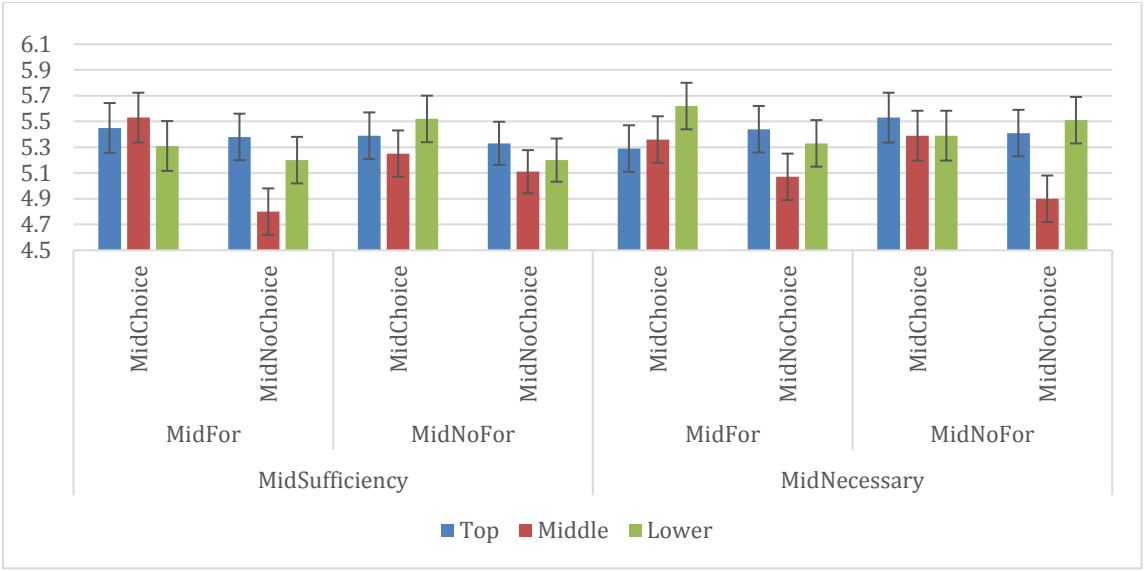


Figure E4b. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Political Ideology 5-way interaction – liberal participants.

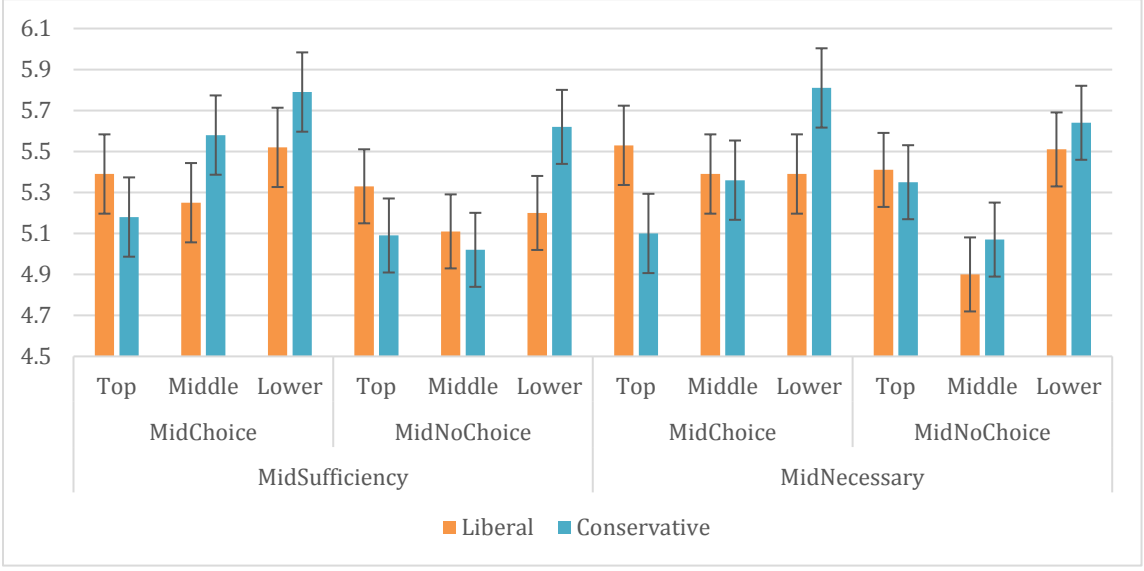


Figure E4c. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had no foreseeability.

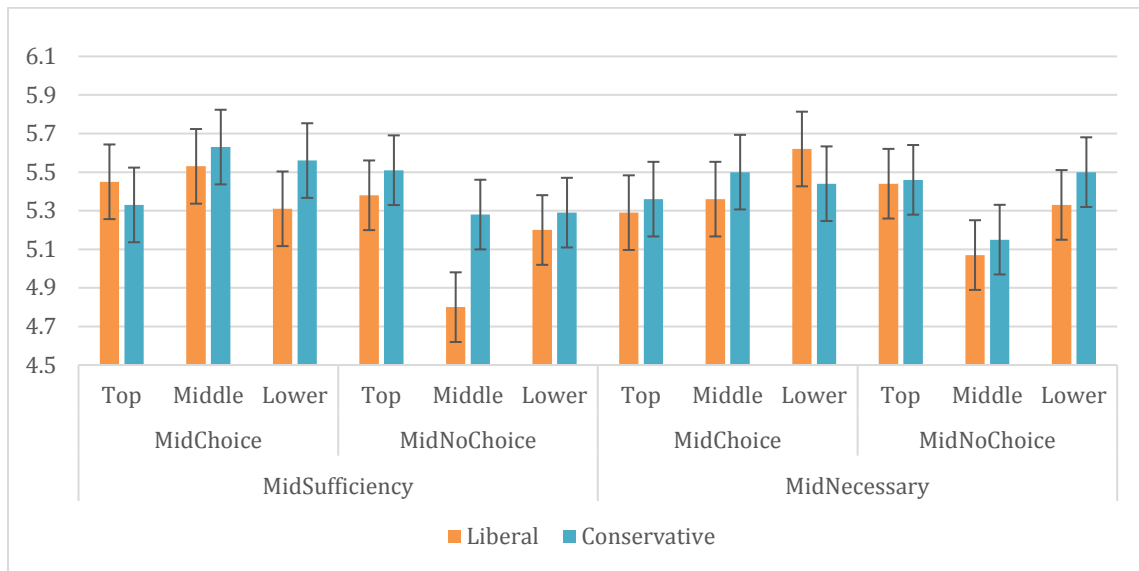


Figure E4d. Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Middle Manager had foreseeability.

more culpable than the top manager (when the conditions were the same as for the lower agent, $M = 5.10$), $p = .0076$ (see Figure E4a). In this situation, the middle manager was not forcing the lower agent to take any action, and thus it was logical for the lower agent to be held more culpable for his actions compared to the top manager, for whom all of the variables occurred after him. For liberals, the lower agent (when the middle manager's actions were necessary, foreseeable, and he had a choice, $M = 5.62$) was more culpable than the middle manager (when his actions were sufficient, foreseeable, and he did not have a choice, $M = 4.80$), $p = .0101$ (see Figure E4b). For conservatives the middle manager was held less culpable when he did not have a choice, even if his actions predetermined the actions of the lower agent. The lower agent was held more culpable when his actions were not predetermined by the middle manager (even if the middle manager had foreseeability and a choice).

When comparing more liberal and conservative individuals, there were several conditions that resulted significant differences. First, when the middle manager's actions were sufficient and he had no choice nor foreseeability, conservatives found the lower agent more culpable than liberals (see Figure E4c). Second, when the middle manager's actions were necessary and he had a choice, but no foreseeability, there was an exculpatory effect on the top manager and an inculpatory effect on the lower agent for conservatives. For liberals in this scenario, there are no significant differences in culpability between the different actors. Third, when the middle manager's actions were sufficient and he had foreseeability, but no choice, liberals held the middle manager less culpable than conservatives (see Figure E4d). It may be that in this condition, liberals were placing more emphasis on the lack of choice and seeing that as a mitigating factor,

whereas conservatives were focusing more so on his actions being sufficient and foreseeable, resulting in higher culpability.

There was also a significant Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology interaction, $\chi^2(2) = 11.77, p = .0028$. For conservatives, there were two conditions that resulted in significantly different culpability, one resulting in higher culpability for the lower agent and the other resulting in lower culpability for the middle manager. These two conditions were significantly different when compared to each other and to other scenarios as well (see Figure E5a).

When compared to each other, the lower agent (when the middle manager did not have foreseeability but had a choice, and the top manager did not have a choice, $M = 5.98$) was more culpable than the middle manager (when he did not have foreseeability or a choice, and the top manager did not have a choice either, $M = 4.73$), $p < .0001$. When compared to other scenarios, there were several significant differences. The middle manager (when he did not have foreseeability or a choice, and the top manager did not have a choice either, $M = 4.73$) was less culpable than the lower agent (when the middle manager's actions were not foreseeable and the top manager had a choice, regardless of middle manager choice, $M_{\text{NoChoice}} = 5.68, p = .0028$; $M_{\text{Choice}} = 5.63, p = .0126$). The middle manager was also less culpable than the top manager (when the middle manager had foreseeability and both the upper and middle managers had no choice, $M = 5.44$), $p = .0087$.

The lower agent (when the middle manager did not have foreseeability but had a choice, and the top manager had no choice) was more culpable than the top manager (when the middle manager did not have foreseeability and the top manager did not have a choice, regardless of Middle Manager Choice, $M_{\text{NoChoice}} = 5.07, p = .0055$; $M_{\text{Choice}} = 5.04, p < .0001$). The lower agent was also more culpable than the middle manager (when the middle manager had foreseeability and both the upper and middle managers did not have a choice, $M = 5.02$), $p = .0015$ (see Figure E5a).

For liberals, there was one condition that drove all the significant findings. The middle manager (when the middle manager had foreseeability and both the upper and middle managers did not have a choice, $M = 4.57$) was significantly less culpable than itself, the upper, and the lower agent agents in certain scenarios (see Figure E5b). First, we will discuss the middle manager in relation to itself. The middle manager was less culpable than itself (when the middle manager had foreseeability and both the upper and middle managers had a choice, $M = 5.47$), $p = .0096$. This result shows liberals emphasizing choice when determining culpability. When the upper and middle managers did not have a choice, the middle manager was less culpable compared to when they both did have a choice.

Next, we will discuss the middle manager in relation to the top manager. The middle manager was less culpable than the top manager (when the middle manager had foreseeability and no choice, regardless of Top Manager Choice, $M_{\text{NoChoice}} = 5.35, p = .0013$; $M_{\text{Choice}} = 5.47, p = .0066$). The middle manager was also less culpable than the top manager (when the middle manager did not have foreseeability and the top manager did not have a choice, regardless of Middle Manager Choice, $M_{\text{NoChoice}} = 5.48, p < .0001$; $M_{\text{Choice}} = 5.53, p = .0022$).

Finally, we will discuss the middle manager in relation to the lower agent. The middle manager was less culpable than the lower agent (when neither the upper nor middle managers had a choice, regardless of Middle Manager Foreseeability, $M_{For} = 5.28$, $p = .0083$; $M_{NoFor} = 5.29$, $p = .0059$). The middle manager was also less culpable than the lower agent (when both the upper and middle managers did have a choice, regardless of Middle Manager Foreseeability, $M_{For} = 5.35$, $p = .0028$; $M_{NoFor} = 5.48$, $p = .0072$).

When comparing more liberal and conservative individuals, there were several

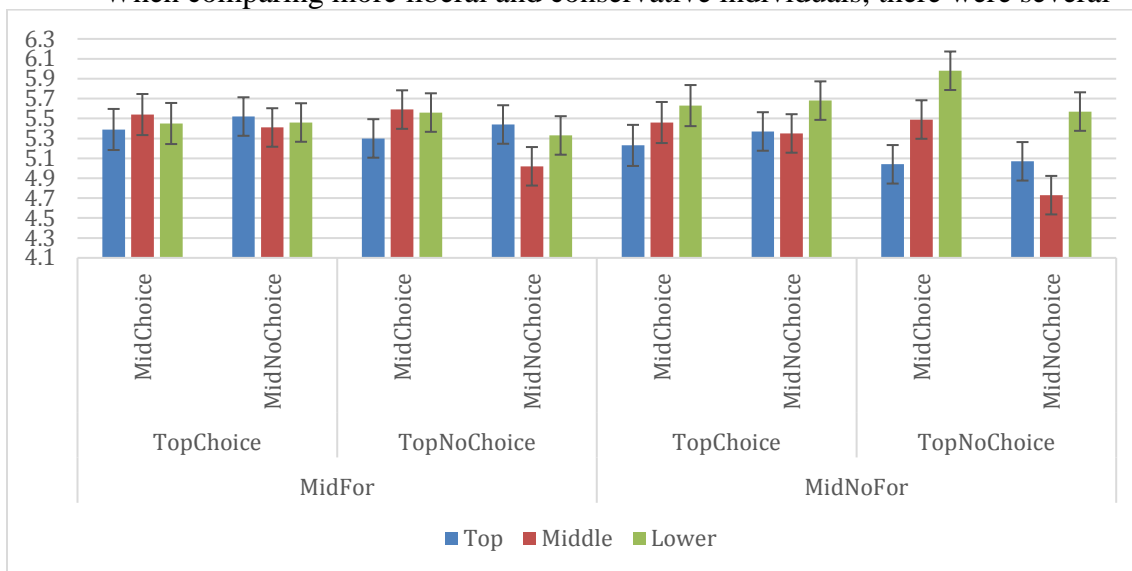


Figure E5a. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology 5-way interaction – conservative participants.

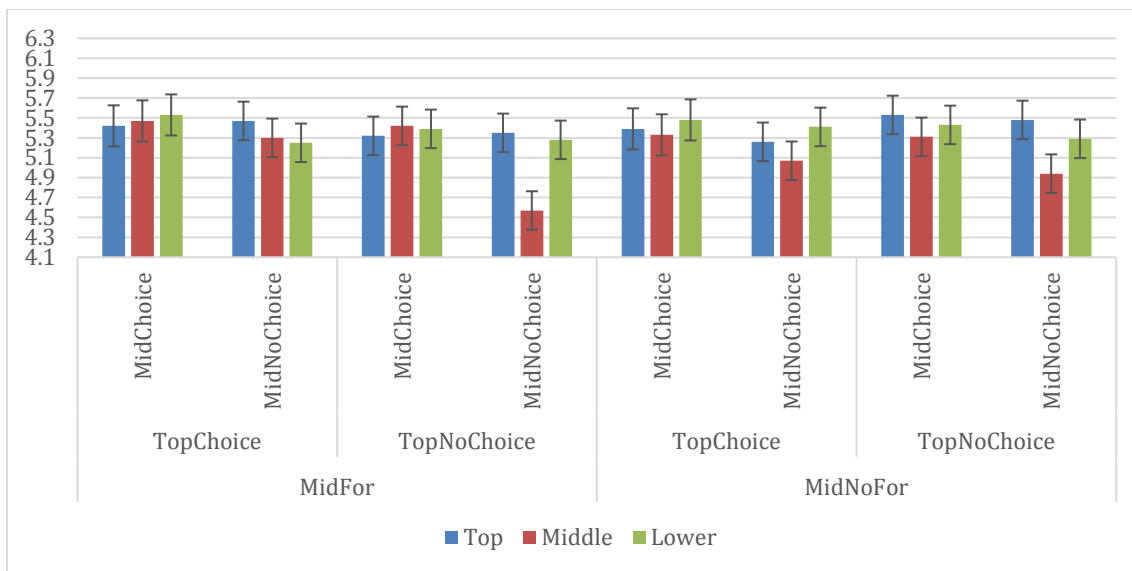


Figure E5b. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology 5-way interaction – liberal participants.

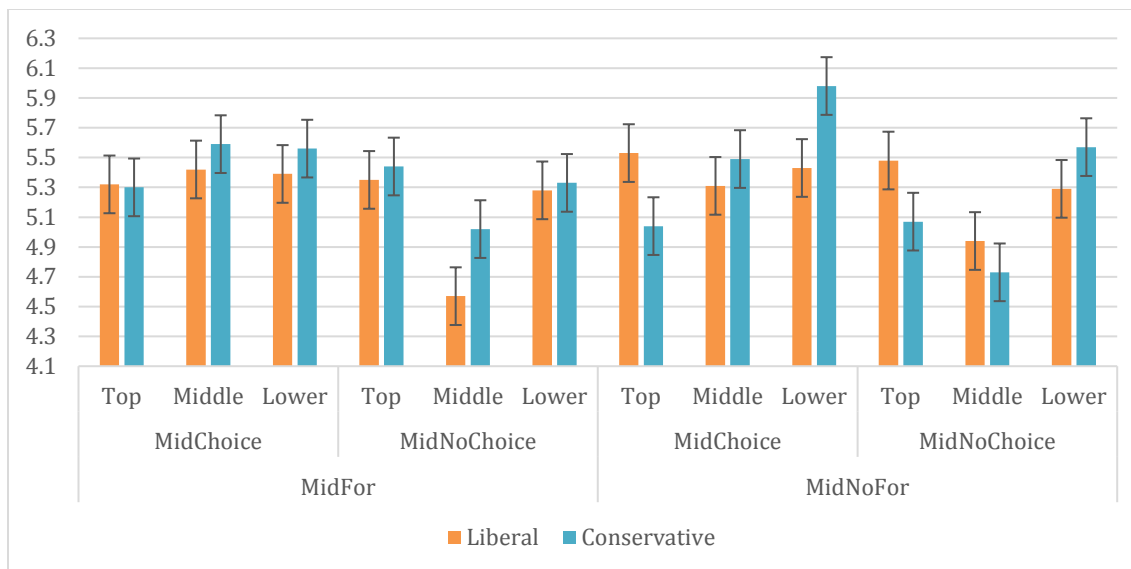


Figure E5c. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Top Manager had no choice.

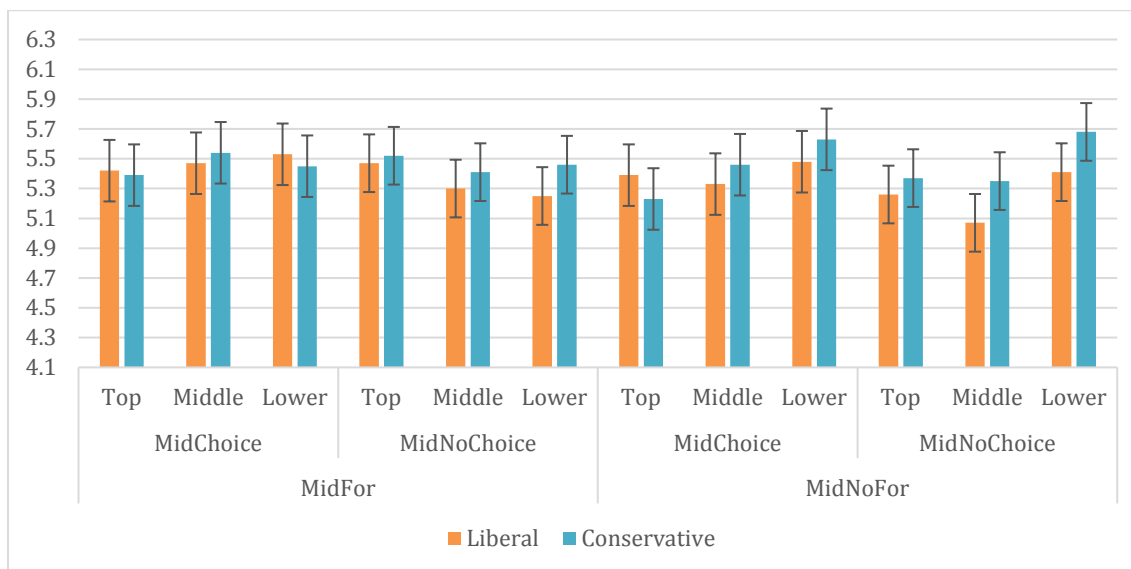


Figure E5d. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology 5-way interaction – examining liberal and conservative individuals in the conditions where the Top Manager had a choice.

conditions that resulted significant differences when the top manager did not have a choice (see Figure E5c). First, when the middle manager did not have foreseeability or a choice, liberals held the middle manager less culpable than conservatives. Second, when the middle manager did not have foreseeability but did have a choice, conservatives saw this scenario as exculpatory for the top manager and inculpatory for the lower agent. In other words, in this situation, conservatives held the top manager less culpable than

liberals and they held the lower agent more culpable than liberals. When the top manager had a choice, there were no significant differences (see Figure E5d).

There were six six- or seven-way interactions found for Political Ideology. Three of these were best thought of as a combination of two previously discussed models, and the other three were best thought of as a previously discussed five- or six-way interaction with the inclusion of another variable. First, there was a significant Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology interaction, $\chi^2(2) = 20.10$, $p < .0001$. This could be viewed as a combination of the Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology interaction and the Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology interaction. Both of these interactions have Middle Manager Sufficiency/Necessity and Middle Manager Foreseeability in common.

There was a combined effect for the conservative individuals when these two models were combined. The means for the significant findings for the six-way interaction were more extreme than their counterparts in the two five-way interactions. The middle manager (when the top manager's actions were necessary and he did not have a choice, and the middle manager's actions were necessary and not foreseeable, $M = 4.79$) was less culpable than the lower agent (when the top manager's actions were sufficient and he did not have a choice, and the middle manager's actions were sufficient and he did not have foreseeability, $M = 5.95$), $p = .0048$. This result had more extreme means than when compared to the Top Manager Sufficiency/Necessity model ($M = 5.26$, $M = 5.77$, respectively) and the Top Manager Choice model ($M = 4.92$, $M = 5.86$, respectively). This finding shows the impact of both the upper and middle manager's actions being either necessary or sufficient.

There were significant differences between the lower agent and the upper/middle managers in the condition where the top manager had no choice, the middle manager did not have foreseeability, and both the upper and middle manager's actions were necessary. In this scenario, the lower agent ($M = 5.95$) was more culpable than the top manager ($M = 4.85$), $p = .0025$, and the middle manager ($M = 4.79$), $p = .0008$. Again, these means were more extreme in the combined interaction than they were for the Top Manager Sufficiency/Necessity model ($M_{\text{Lower}} = 5.94$, $M_{\text{Top}} = 5.12$, $M_{\text{Middle}} = 5.26$) and the Top Manager Choice model ($M_{\text{Lower}} = 5.69$, $M_{\text{Top}} = 5.01$, $M_{\text{Middle}} = 4.92$). In other words, when both the upper and middle manager's actions were necessary (enabled the next person in the causal chain, but did not predetermine their actions), the top manager did not have a choice, and the middle manager did not have foreseeability, we found what would be expected under those conditions – ultimate culpability going to the lower agent because the actions of the individuals higher in the chain did not force him to take any actions.

There were no significant findings for the more liberal individuals, $ps > .01$.

Second there was a significant Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Top Manager Choice by Political Ideology interaction, $\chi^2(2) = 9.26$, $p = .0098$. This could be viewed as a combination of the Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Political Ideology interaction and

the Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology interaction. Both of these interactions have Middle Manager Sufficiency/Necessity and Middle Manager Foreseeability in common.

Once again, there was a combined effect for the conservative individuals when these two models were combined. The means for the significant findings for the six-way interaction were more extreme than their counterparts in the two five-way interactions. The lower agent (when the top manager had foreseeability and no choice, and the middle manager's actions were sufficient and he did not have foreseeability, $M = 5.91$) was more culpable than the top manager ($M = 4.79$) and the middle manager ($M = 4.74$) when the top manager did not have foreseeability nor a choice, and the middle manager agent's actions were necessary and not foreseeable, $p_{\text{Top}} = .0044$, $p_{\text{Middle}} = .0015$. This result had more extreme means than when compared to the Top Manager Foreseeability model ($M_{\text{Lower}} = 5.67$, $M_{\text{Top}} = 5.10$, $M_{\text{Middle}} = 5.17$) and the Top Manager Choice model ($M_{\text{Lower}} = 5.86$, $M_{\text{Top}} = 5.01$, $M_{\text{Middle}} = 4.92$). This finding demonstrated the exculpatory impact of no foreseeability/choice for the middle manager and no foreseeability/necessary actions for the top manager. In other words, when the situation was one that allowed for minimal culpability for the upper and middle managers, conservatives made decisions in that way. The lower agent in the scenario with these conditions, however, was held more culpable ($M = 5.77$) than the middle manager in the same condition, $p = .0061$. This shows conservatives finding the lower agent more culpable when there was not much done by the upper or middle managers that would increase their culpability (as with the most recent scenario), and when there was a division of culpable actions between the upper and middle managers (as with the first scenario). It is possible that this division of culpability made it so that conservatives ended up relying on proximity to the wrongdoing when making their culpability determinations.

There were no significant findings for the more liberal individuals, $ps > .01$.

Third, there was a significant Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology interaction, $\chi^2(2) = 15.21$, $p = .0005$. This could be viewed as a combination of the Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Political Ideology interaction and the Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Political Ideology interaction. Both of these interactions have Middle Manager Sufficiency/Necessity and Middle Manager Foreseeability in common.

Similar to the previous two six-way interactions, there again appears to be somewhat of a combined effect when the two five-way interactions are combined. With this interaction, however, the findings are less clear-cut, as the means for the combined interactions were not always more extreme than the two individual interactions. What was consistent, was that the conditions that resulted in uncharacteristically low means were lower in the combined interaction than they were in the individual ones. The higher means that were significantly different from these low means tended to be around the same for both the combined and individual interactions. This suggests that as complexity is added, participants may have a clearer idea of who is least culpable, but the nuances between those who are more culpable are less discernable.

For conservatives, the middle manager (when his actions were necessary, not

foreseeable, and both he and the top manager did not have a choice, $M = 4.49$) was held less culpable than the lower agent and himself in several other conditions, $ps < .01$. This finding is as expected, when the middle manager has all the conditions that should result in the least amount of culpability, he is found least culpable. For liberals, the middle manager was still the agent held least culpable compared to the top manager, the lower agent, and himself in different conditions, $ps < .01$, but the scenario was different from the one for the conservatives. For them, the middle manager was least culpable when his actions were sufficient, he had foreseeability, and both he and the top manager did not have a choice ($M = 4.26$). This result is somewhat less expected. When the middle manager's actions were sufficient and foreseeable, he should be found more culpable because he is in essence forcing the lower agent to act and knows that there is a possibility for a negative outcome. However, since this did not happen, liberals are evidently placing much more emphasis on Middle Manager Choice. When the middle manager did not have a choice, he was less culpable, regardless of his other actions/knowledge.

Fourth, there was a significant Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology interaction, $\chi^2(2) = 18.89$, $p < .0001$. This could be viewed as the Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Political Ideology interaction with the addition of Top Manager Sufficiency/Necessity.

For conservatives, in general, the lower agent was held more culpable compared to the upper and middle managers. The lower agent was most culpable when the top manager did not have a choice, and the middle manager did not have foreseeability but he did have a choice (regardless of Top Manager Sufficiency/Necessity, $M_{Suf} = 5.93$, $M_{Nec} = 6.03$). Even though the middle manager had a choice, this still might not be viewed as strongly directly impacting the actions of the lower agent, resulting in the increased lower agent culpability that was found. The least culpable, was the middle manager (when the top manager's actions were necessary, the middle manager did not have foreseeability, and neither had a choice, $M = 4.62$). This, again, is a situation that we would expect should result in low culpability for the middle manager.

For liberals, there was one condition that resulted in the middle manager being held significantly less culpable than the top manager and lower agent in several different scenarios, all $ps < .01$. All the significant conditions had the top manager's actions being sufficient, indicating that when the top manager predetermined the actions of the middle manager, the middle manager was less culpable and the lower agent and top managers were more culpable (under select conditions). The middle manager was least culpable when the top manager's actions were sufficient, the middle manager had foreseeability, and neither had a choice ($M = 4.42$), $ps < .01$. In other words, when the middle manager's actions were predetermined by the top manager, the middle manager was held less culpable (even though he had foreseeability). For conservatives, it appears that Top Manager Sufficiency/Necessity was not very important, whereas for liberals, it was only when the top manager's actions were sufficient that the culpability for the different agents was most extreme.

Fifth, there was a significant Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle

Manager Choice by Political Ideology interaction, $\chi^2(2) = 13.88, p = .0010$. This could be viewed as the Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Political Ideology interaction with the addition of Middle Manager Choice.

For conservatives, the middle manager was held less culpable in two scenarios when he did not have a choice (compared to when Middle Manager choice was not included in the interaction). The middle manager was less culpable when the top manager's actions were sufficient and the middle manager's actions were necessary, he had foreseeability, and did not have a choice ($M = 4.75$). We would expect the middle manager to have less culpability in this condition, because even though he had foreseeability, the top manager's actions predetermined the middle manager's actions and he did not have a choice nor did he force the lower agent to act. The middle manager was also less culpable when both the upper and middle manager's actions were sufficient, but the middle manager did not have foreseeability or a choice ($M = 4.78$). In this situation, conservatives are likely emphasizing the role of the top manager's actions predetermining the actions of the middle manager, and perhaps seeing the middle manager's actions being sufficient as being an outcome of the top manager's influence. Both of these means were more extreme than their non-Middle Manager Choice counterparts ($M = 5.07, M = 5.18$, respectively), and significantly lower than the lower agent (when the upper and middle manager's actions were necessary, and the middle manager did not have foreseeability but had a choice, $M = 5.99$), $p = .0061$ and $p = .0064$, respectively. In general, the middle manager was held least culpable when he did not have a choice and the lower agent was held most culpable when the middle manager did have a choice but did not have foreseeability of the outcome.

For liberals, the middle manager was only held least culpable when both the upper and middle manager's actions were sufficient, the middle manager had foreseeability, but the middle manager did not have a choice ($M = 4.45$). This mean was more extreme than its non-Middle Manager Choice counterpart ($M = 5.02$). The middle manager was significantly less culpable than the upper and lower agent agents in a variety of scenarios, $ps < .01$. This finding suggests that for liberals, even when the middle manager could foresee the outcome of their decision and forced the actions of the lower agent, his lack of choice in conjunction with the top manager forcing the middle manager's actions, resulted in low culpability. This differed from conservatives, in that they needed for the middle manager's actions to either be necessary or not foreseeable to hold them less culpable. In other words, there needed to be some other mitigating factor for the conservatives, whereas for liberals it only mattered that the middle manager did not have a choice.

Finally, there was a seven-way interaction, which was the current six-way interaction we just discussed with the inclusion of Top Manager Foreseeability, $\chi^2(2) = 12.21, p = .0022$. For conservatives, there were no significant interactions, all $ps > .01$. For liberals, however, this interaction showed that when the top manager had foreseeability, the middle manager condition that resulted in the lowest culpability rating for the six-way interaction, was even lower ($M = 4.00$). As before, the middle manager was significantly less culpable than the upper and lower agent agents in a variety of scenarios, $ps < .01$. This shows that liberals emphasize the actions/knowledge of the

individual who initiated the causal chain and predetermined the actions of the middle manager, over the resulting actions of said middle manager that were focused toward the lower agent, when the middle manager did not have a choice. Liberals are seeing the middle manager's actions as a result of the top manager's actions, and even though he may pass these same conditions on to the lower agent, he is not held culpable because he did not have a choice.

Appendix F. Detailed write up of 5- and 6-way interactions involving Feelings towards Big Businesses as a moderator

This interaction was further qualified by both Top Manager Sufficiency/Necessity, $\chi^2(2) = 9.77, p = .0076$, and Top Manager Foreseeability, $\chi^2(2) = 10.70, p = .0047$. First we will examine the interaction involving sufficiency/necessity, followed by the interaction involving foreseeability. For the Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Big Business interaction, there were two conditions that drove the results for individuals high in Big Business (see Figure F1a). First, the lower agent (when both the upper and middle manager's actions were necessary and the middle manager did not have foreseeability, $M = 5.96$) was more culpable than the lower and top managers in two conditions. The lower agent was more culpable than the middle manager when both the upper and middle manager's actions were sufficient and the middle manager did not have foreseeability ($M = 5.21$), $p = .0117$, and the top manager when both the upper and middle manager's actions were necessary and the middle manager did not have foreseeability ($M = 5.21$), $p = .0075$.

Second, the top manager (when his actions were necessary and the middle manager's actions were sufficient and not foreseeable, $M = 4.88$) was deemed less culpable than the lower agent in several scenarios. The lower agent was more culpable when the middle manager's actions were necessary and not foreseeable (regardless of Top Manager Sufficiency/Necessity, $M_{Suf} = 5.60, p = .0131$; $M_{Nec} = 5.96, p < .0001$). The lower agent was also more culpable than the top manager when the middle manager's actions were sufficient and not foreseeable (regardless of Top Manager Sufficiency/Necessity, $M_{Suf} = 5.68, p = .0030$; $M_{Nec} = 5.77, p = .0001$). In other words, regardless of Top and Middle Manager Sufficiency/Necessity, when the middle

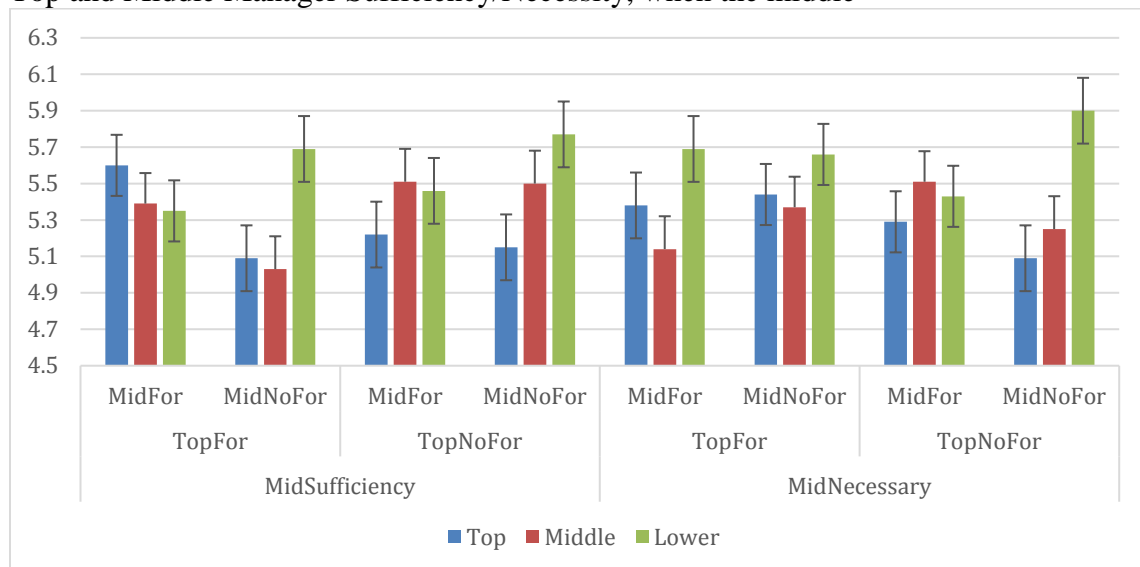


Figure F1a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – participants who like big businesses more.

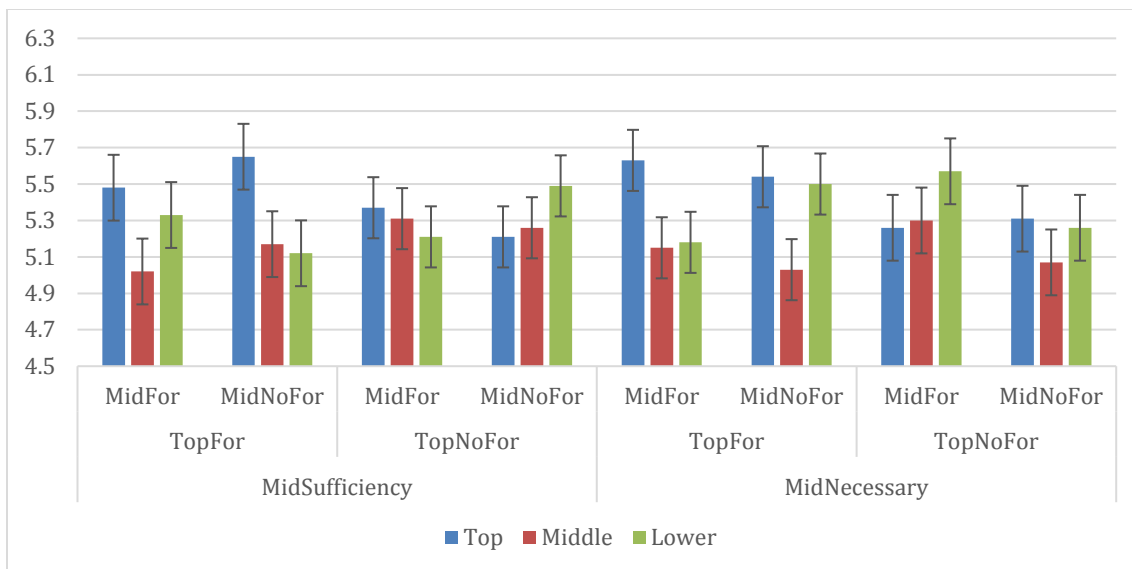


Figure 11b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – participants who like big businesses less.

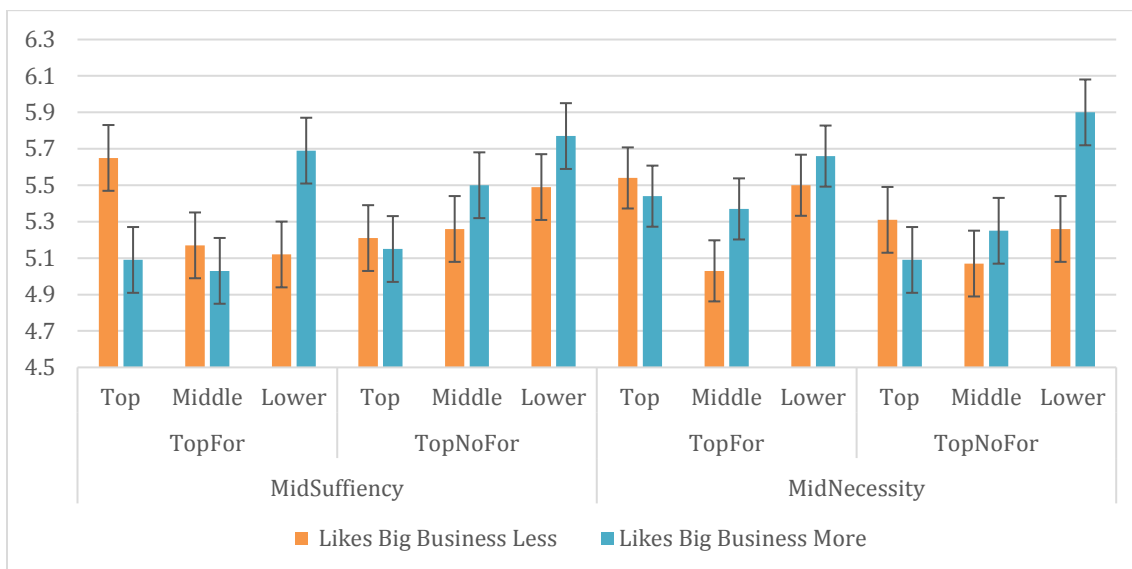


Figure 11c. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had no foreseeability.

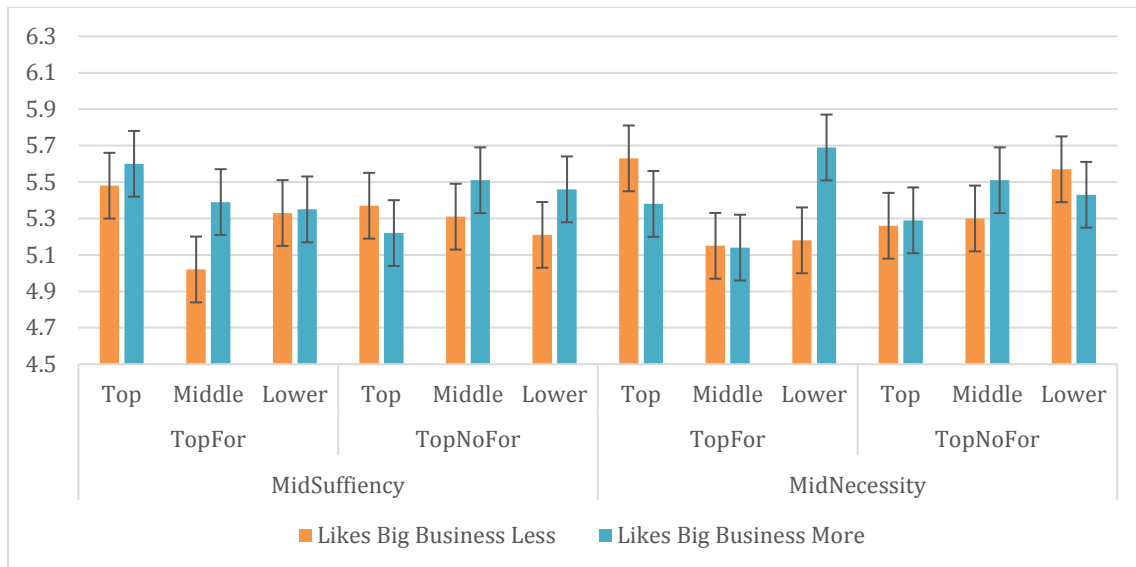


Figure F1d. Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had foreseeability.

manager's actions were not foreseeable, the lower agent was found more culpable than the top manager. At low levels of Big Business there were no significant differences (see Figure F1b).

When comparing individuals low and high in Big Business, there were several conditions that resulted significant differences when the middle manager did not have foreseeability (see Figure F1c). First, when the top manager's actions were sufficient and the middle manager's actions were necessary, those low in Big Business held the middle manager significantly less culpable than those high in Big Business. More specifically, low Big Business individuals acted how we would expect people to respond in this situation (namely find the top manager more culpable and the middle manager less culpable), but high Big Business individuals did not have any difference in culpability between the upper and middle managers. Second, when the top manager's actions were necessary, regardless of Middle Manager Sufficiency/Necessity, individuals high in Big Business held the lower agent more culpable than those low in Big Business. When the middle manager had foreseeability, there were no significant differences (see Figure F1d).

For the Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Big Business interaction, there were again two conditions that drove the results for individuals high in Big Business (see Figure F2a). When both the upper and middle managers did not have foreseeability (regardless of Middle Manager Sufficiency/Necessity), the lower agent was held more culpable than the upper and middle managers in several conditions ($M_{Suf} = 5.77$; $M_{Nec} = 5.90$). First, when the middle manager's actions were sufficient, the lower agent was more culpable than the middle manager (when the top manager's actions were foreseeable and the middle manager's actions were sufficient and he did not have

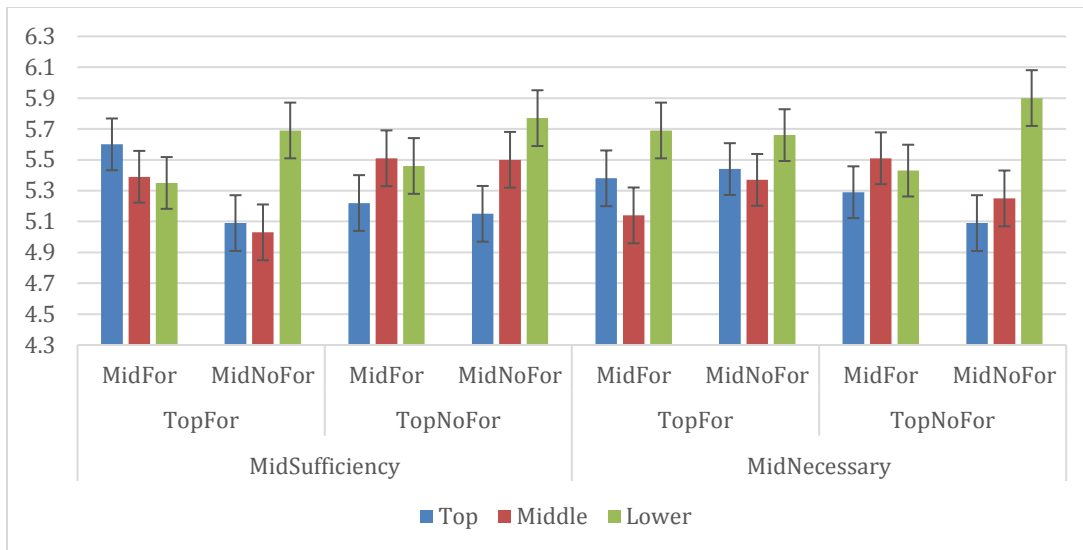


Figure F2a. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – participants who like big businesses more.

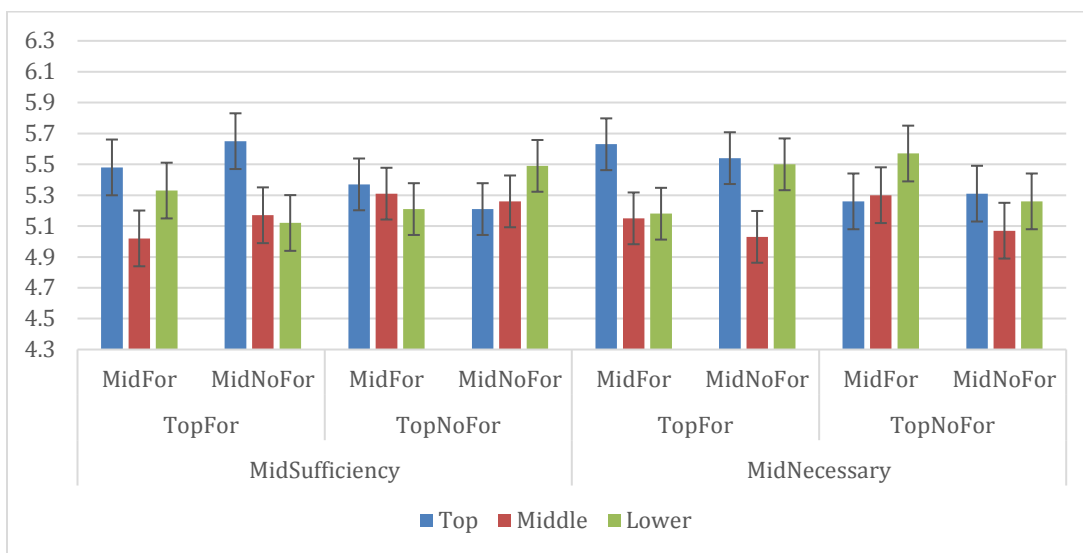


Figure F2b. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – participants who like big businesses less.

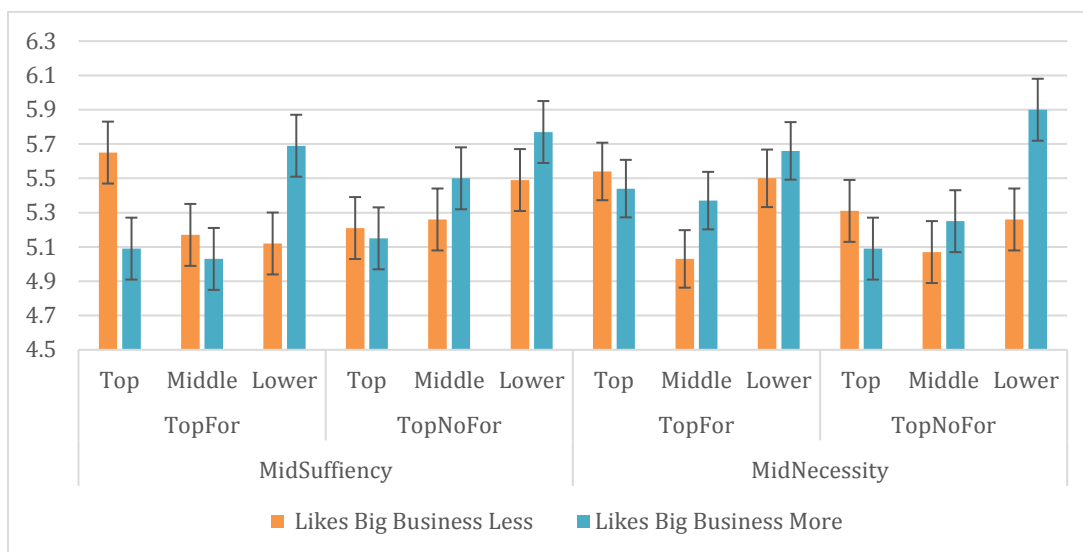


Figure F2c. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had foreseeability.

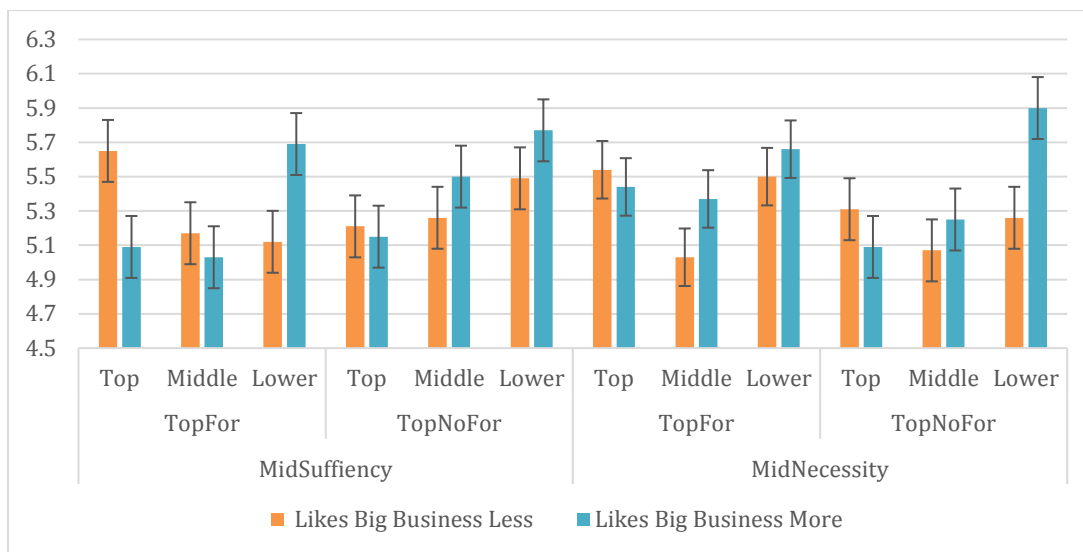


Figure F2d. Actor by Middle Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had no foreseeability.

foreseeability, $M = 5.03$), $p = .0127$.

Second, when the middle manager's actions were necessary, the lower agent was more culpable than the lower and top managers in several scenarios. The middle manager was less culpable when his actions were sufficient and not foreseeable, and the top

manager had foreseeability ($M = 5.03$), $p = .0005$. The top manager was less culpable when neither the upper nor middle managers had foreseeability (regardless of Middle Manager Sufficiency/Necessity, $M_{\text{Suf}} = 5.15$, $p = .0134$; $M_{\text{Nec}} = 5.09$, $p = .0013$) and when the middle manager's actions were sufficient and not foreseeable, while the top manager's actions were foreseeable ($M = 5.09$), $p = .0005$. At low levels of Big Business there were no significant differences (see Figure F2b).

When comparing individuals low and high in Big Business, there were several conditions that resulted in significant differences. First, when the middle manager's actions were necessary and both the upper and middle manager's actions were foreseeable, individuals high in Big Business held the lower agent more culpable than those low in Big Business (see Figure F2c). Second, when the middle manager's actions were sufficient and not foreseeable, but the top manager's actions were foreseeable, individuals low and high in Big Business differed on which agent should be found most culpable (see Figure F2d). Individuals low in Big Business found the top manager most culpable, whereas those high in Big Business found the lower agent most culpable. These results suggest that low Big Business individuals might have put more weight on the actions of the individual at the beginning of the chain, while high Big Business individuals might have put more weight on the actions of the person in the middle of the chain (and whose actions directly impacted the lower agent). Finally, when the middle manager's actions were necessary and neither the upper nor middle managers had foreseeability, individuals high in Big Business held the lower agent more culpable than their low Big Business counterparts (see Figure F2d).

There were also significant Actor by Top Manager Sufficiency/Necessity by Middle Manager Choice by Big Business interactions that were further qualified by Top Manager Foreseeability, $\chi^2(2) = 11.35$, $p = .0034$, and Middle Manager Foreseeability, $\chi^2(2) = 10.07$, $p = .0065$. First, we'll examine the Top Manager Foreseeability interaction, followed by Middle Manager Foreseeability.

For the interaction including Top Manager Foreseeability, at high levels of Big Business, there was one condition that drove all the significant findings (see Figure F3a). The middle manager, when the top manager's actions were sufficient and foreseeable, and the middle manager did not have a choice ($M = 4.71$), was held significantly less culpable than itself and the lower agent in several scenarios. The middle manager was less culpable than itself, when the top manager did not have foreseeability and the middle manager had a choice (regardless of Top Manager Sufficiency/Necessity, $M_{\text{Suf}} = 5.56$, $p = .0062$; $M_{\text{Nec}} = 5.67$, $p = .0008$). The middle manager was less culpable than the lower agent when the middle manager had a choice (regardless of Top Manager Sufficiency/Necessity and Top Manager Foreseeability, $M_{\text{Suf/For}} = 5.72$, $p = .0002$; $M_{\text{Nec/For}} = 5.63$, $p = .0013$; $M_{\text{Suf/NoFor}} = 5.75$, $p = .0001$; $M_{\text{Nec/NoFor}} = 5.70$, $p = .0004$). The lower agent was also more culpable when the middle manager did not have a choice and the top manager's actions were not foreseeable (regardless of Top Manager Sufficiency/Necessity, $M_{\text{Suf}} = 5.49$, $p = .0061$; $M_{\text{Nec}} = 5.62$, $p < .0001$). Finally, the lower agent was more culpable when the top manager's actions were necessary and foreseeable, and the middle manager did not have a choice ($M = 5.68$, $p < .0001$).

At low levels of Big Business, the middle manager (when the top manager's actions were sufficient and foreseeable, and the middle manager did not have a choice –

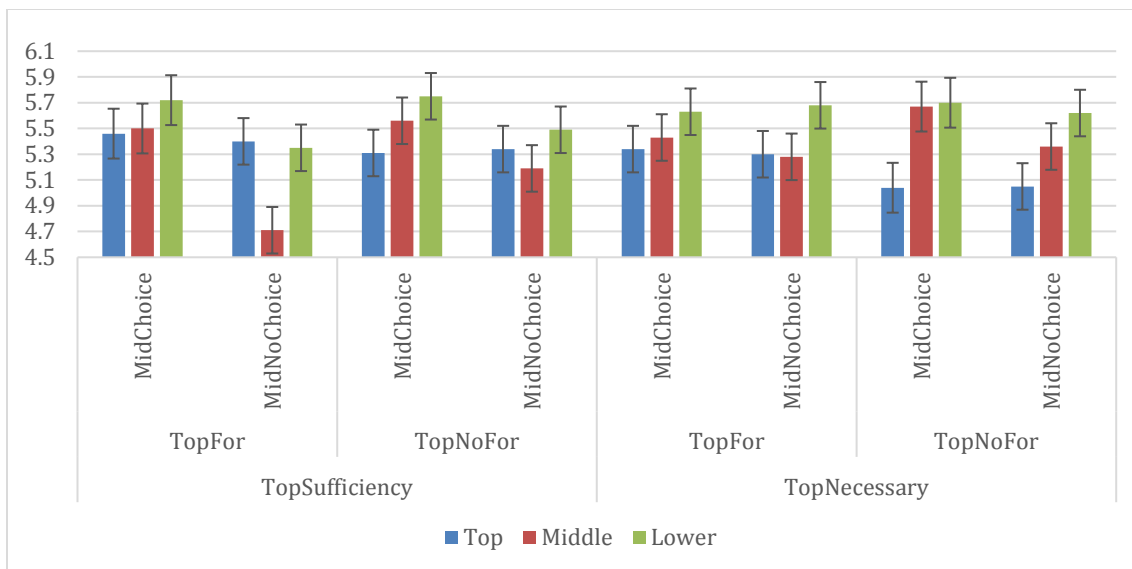


Figure F3a. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – participants who like big businesses more.

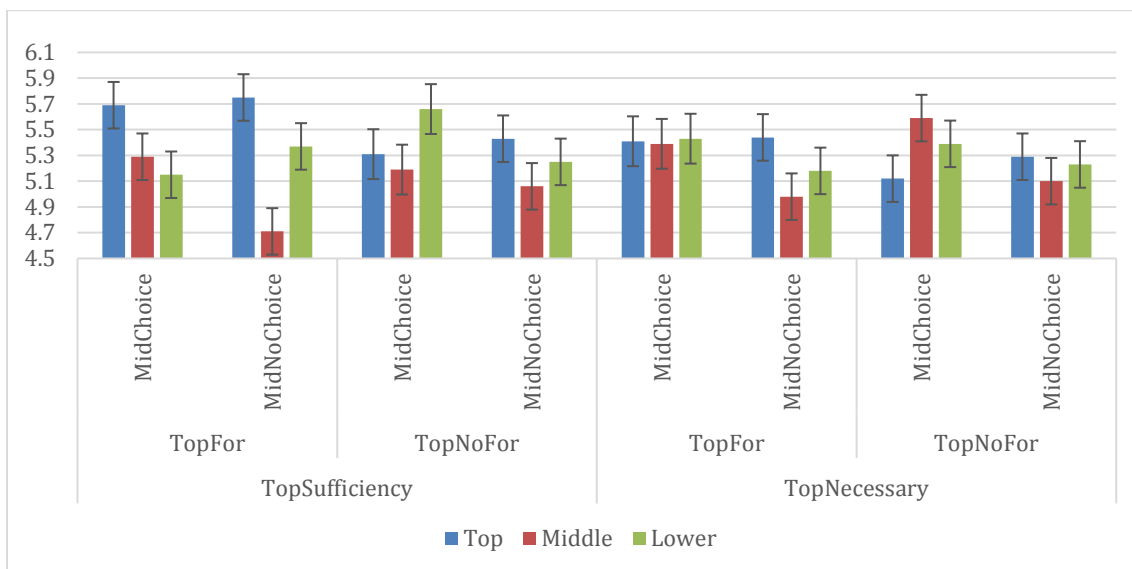


Figure F3b. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – participants who like big businesses less.

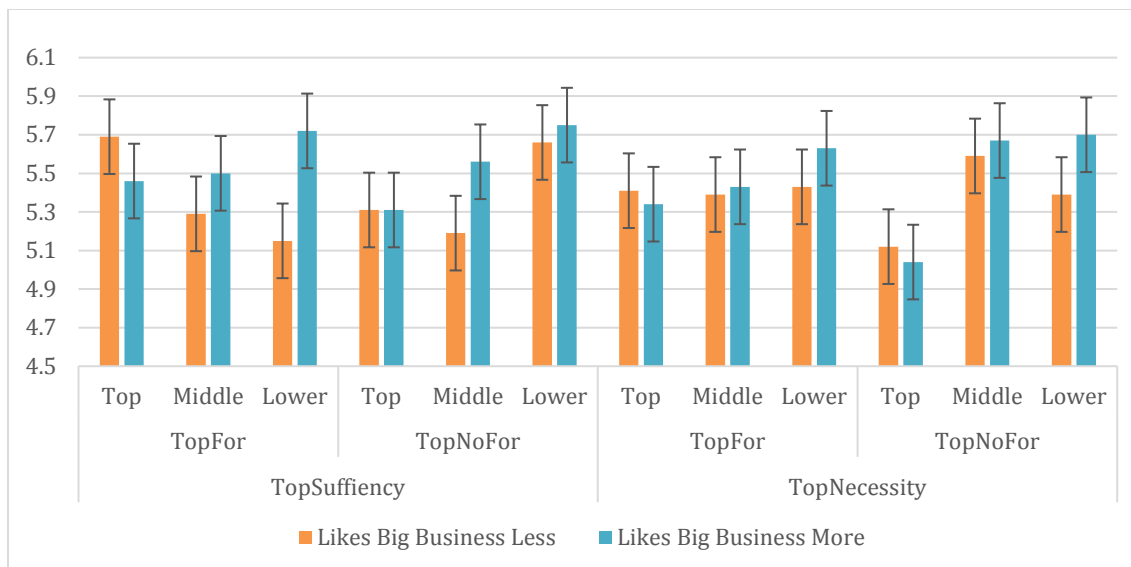


Figure F3c. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had a choice.

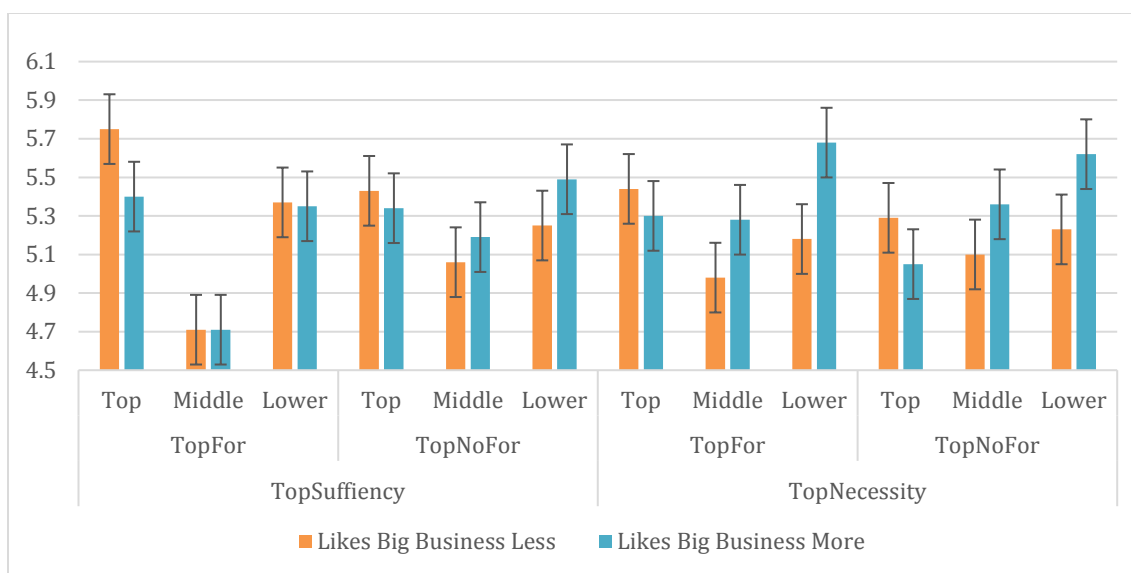


Figure F3d. Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had no choice.

identical to the condition for those high in Big Business, $M = 4.71$) was less culpable than itself, the lower, and the top manager in certain scenarios (see Figure F3b). The middle manager was more culpable when the top manager's actions were necessary and not foreseeable, and the middle manager had a choice ($M = 5.59$), $p = .0026$. The top

manager was more culpable when his actions were sufficient and he had foreseeability, and the middle manager had a choice ($M = 5.69$), $p = .0002$. The lower agent was more culpable when the top manager's actions were sufficient and not foreseeable, and the middle manager had a choice ($M = 5.66$), $p = .0013$.

The top manager (when his actions were sufficient and he had foreseeability, and the middle manager had no choice, $M = 5.75$) was also held more culpable than the middle manager in two scenarios. The middle manager was less culpable when the top manager's actions were foreseeable and the middle manager had no choice, regardless of Top Manager Sufficiency/Necessity ($M_{\text{Suf}} = 4.71$, $p < .0001$; $M_{\text{Nec}} = 4.98$, $p = .0072$).

When comparing individuals low and high in Big Business, there were several conditions that resulted significant differences. First, when the top manager's actions were sufficient and he had foreseeability and the middle manager had a choice, individuals high in Big Business held the lower agent more culpable than those low in Big Business (see Figure F3c). Second, when the top manager's actions were necessary and the middle manager had no choice (regardless of Top Manager Foreseeability), those high in Big Business held the lower agent more culpable than those low in Big Business (see Figure F3d).

For the interaction including Middle Manager Foreseeability, at high levels of Big Business, there were three conditions that drove the results (see Figure F4a). The lower agent was significantly more culpable than the upper and middle managers in several scenarios when, the middle manager did not have foreseeability but he did had a choice, regardless of Top Manager Sufficiency/Necessity ($M_{\text{Suf}} = 5.87$; $M_{\text{Nec}} = 6.01$), and when the middle manager did not have foreseeability or a choice and the top manager's actions were necessary ($M = 5.73$). All of the significant comparisons found for the lower agent when the top manager's actions were sufficient and the middle manager had a choice but did not have foreseeability were found for when the top manager's actions were necessary as well. Therefore, we will combine the reporting of these two groups.

The lower agent (in both conditions) was more culpable than the middle manager, when the top manager's actions were sufficient and the middle manager had no choice, regardless of Middle Manager Foreseeability (Top Manager Sufficiency results: $M_{\text{For}} = 4.88$, $p = .0004$; $M_{\text{NoFor}} = 5.02$, $p = .0042$; Top Manager Necessity results: $p < .0001$; $p = .0002$, respectively). The lower agent (again in both conditions) was more culpable than the top manager, when the top manager's actions were necessary and the middle manager did not have foreseeability, regardless of Middle Manager Choice (Top Manager Sufficiency results: $M_{\text{NoChoice}} = 5.00$, $p = .0040$; $M_{\text{Choice}} = 5.09$, $p = .0043$; Top Manager Necessity results: $p = .0002$; $p = .0001$, respectively).

For the third condition that resulted in higher culpability for the lower agent (i.e., the top manager's actions were necessary and the middle manager did not have foreseeability or a choice), the lower agent was more culpable than the top manager, when the top manager had all the same conditions as the lower agent ($M = 5.00$), $p = .0107$. The lower agent was also more culpable than the middle manager, when the top manager's actions were sufficient and the middle manager had foreseeability and no choice ($M = 4.88$), $p = .0008$.

For those low in Big Business, there was one condition that drove the significant findings (see Figure F4b): the middle manager was significantly less culpable than the

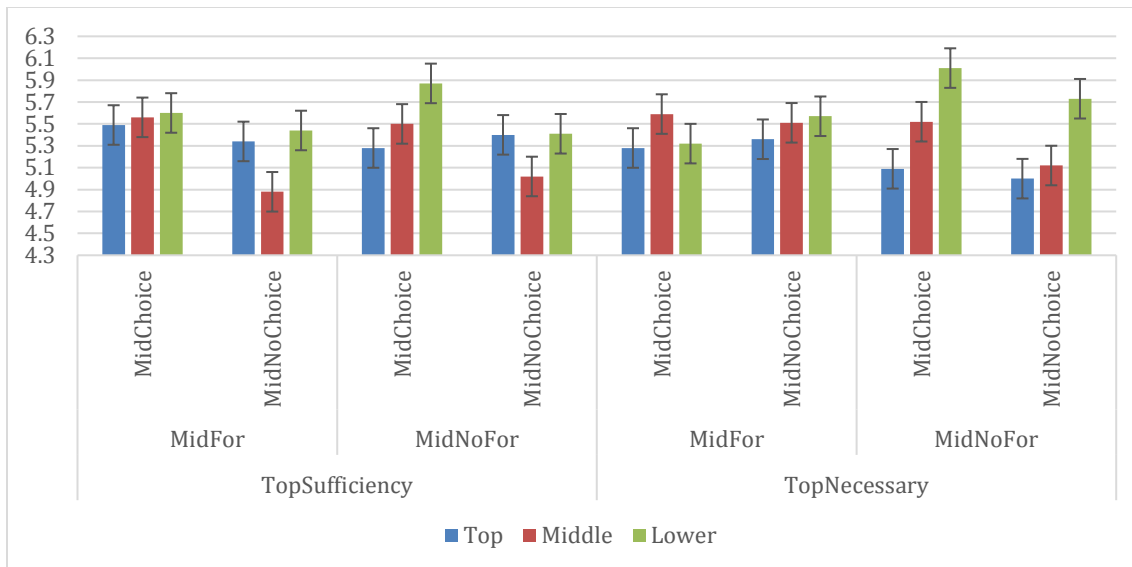


Figure F4a. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – participants who like big businesses more.

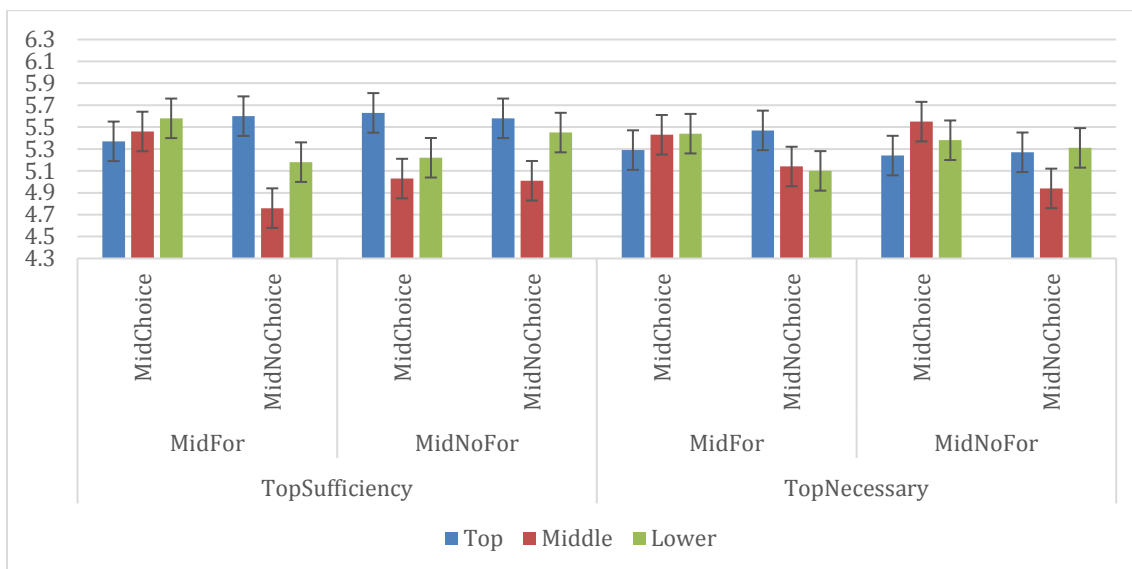


Figure F4b. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – participants who like big businesses less.

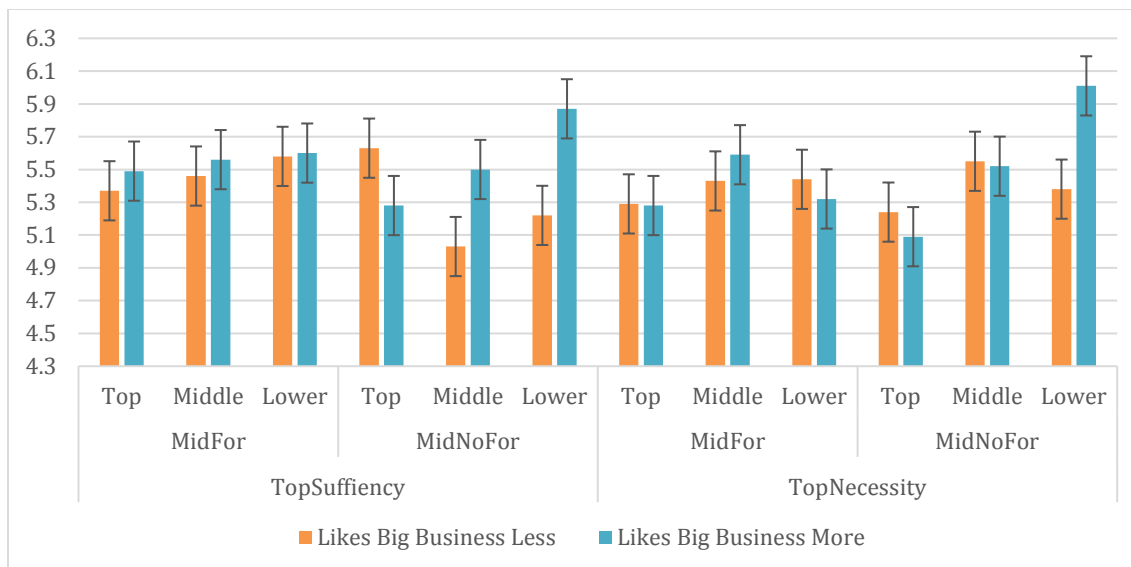


Figure F4c. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had a choice.

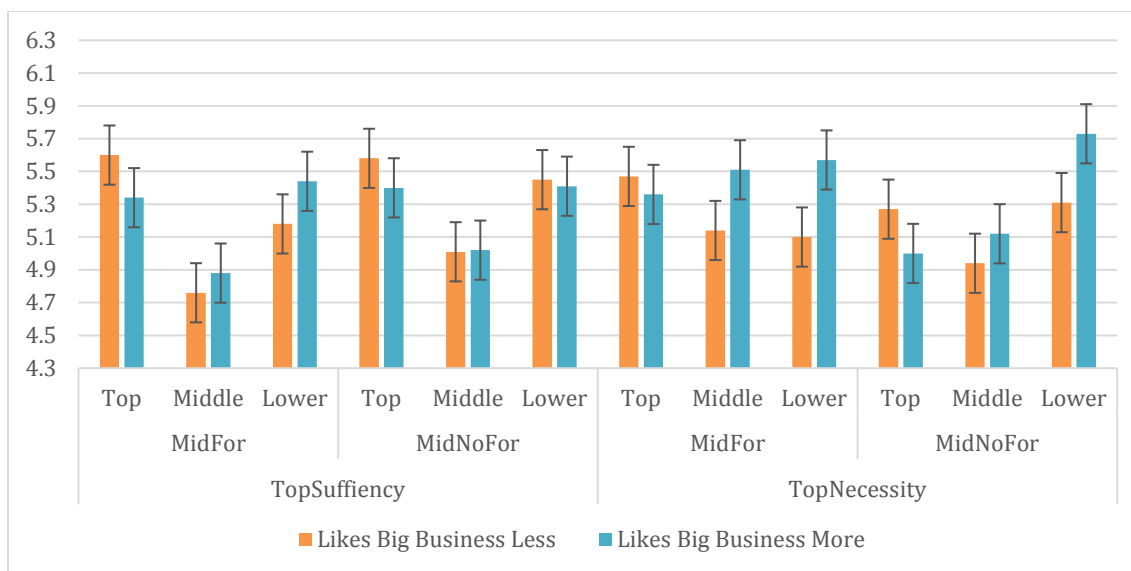


Figure F4d. Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had no choice.

upper and lower agent agents in several scenarios when the top manager's actions were sufficient and the middle manager had foreseeability but did not have a choice ($M = 4.76$). Compared to the middle manager, the top manager was more culpable when the top manager's actions were sufficient and the middle manager did not have a choice

(regardless of Middle Manager Foreseeability, $M_{\text{For}} = 5.60$, $p = .0003$; $M_{\text{NoFor}} = 5.58$, $p = .0016$). The top manager was also more culpable when the top manager's actions were sufficient and the middle manager had a choice but no foreseeability ($M = 5.63$), $p = .0034$. The lower agent was more culpable when the top manager's actions were sufficient and the middle manager had foreseeability and a choice ($M = 5.58$), $p = .0069$.

When comparing individuals low and high in Big Business, there were several conditions that resulted significant differences. First, when the top manager's actions were sufficient and the middle manager had a choice, but no foreseeability, individuals high in Big Business held the middle manager and the lower agent more culpable than those low in Big Business (see Figure F4c). There is also a nearing significant difference for the top manager, with those low in Big Business holding the top manager more culpable than those high in Big Business. Second, when the top manager's actions were necessary and the middle manager had a choice, but no foreseeability, individuals high in Big Business held the lower agent more culpable than those low in Big Business (see Figure F4c). In other words, regardless of Top Manager Sufficiency/Necessity, when the middle manager had a choice and no foreseeability, those high in Big Business found the lower agent more culpable than those low in Big Business. Third, when the top manager's actions were necessary and the middle manager had no choice (regardless of Middle Manager Foreseeability), those high in Big Business held the lower agent more culpable than their low Big Business counterparts (see Figure F4d).

There was also a significant Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business interaction, $\chi^2(2) = 10.46$, $p = .0054$. For high Big Business individuals, there were two conditions that drove the findings and resulted in the lower agent being held more culpable than the upper and middle managers (see Figure F5a). The lower agent was more culpable when the middle manager did not have foreseeability but did have a choice, regardless of Top Manager Choice ($M_{\text{NoChoice}} = 5.91$; $M_{\text{Choice}} = 5.96$).

For the first condition (where the top manager did not have a choice), the top manager was less culpable when he did not have a choice and the middle manager did not have foreseeability, regardless of Middle Manager Choice ($M_{\text{NoChoice}} = 5.08$, $p = .0149$; $M_{\text{Choice}} = 5.11$, $p = .0003$). The middle manager was less culpable when both the upper and middle managers did not have a choice, regardless of Middle Manager Foreseeability ($M_{\text{For}} = 5.04$, $p = .0074$; $M_{\text{NoFor}} = 4.93$, $p = .0008$).

For the second condition (where the top manager had a choice), the middle manager was less culpable when both the upper and middle managers did not have a choice, regardless of Middle Manager Foreseeability ($M_{\text{For}} = 5.04$, $p = .0086$; $M_{\text{NoFor}} = 4.93$, $p = .0011$).

For low Big Business individuals, there were two conditions that drove the findings and resulted in the middle manager being held less culpable than the top manager, the lower agent, and itself in certain scenarios (see Figure F5b). The middle manager was less culpable when both the upper and middle managers did not have a choice, regardless of Middle Manager Foreseeability ($M_{\text{NoFor}} = 4.76$; $M_{\text{For}} = 4.55$). All of the significant comparisons found for the middle manager when the middle manager had foreseeability were found for when the middle manager did not have foreseeability. Therefore, we will combine the reporting of these two groups and then address significant

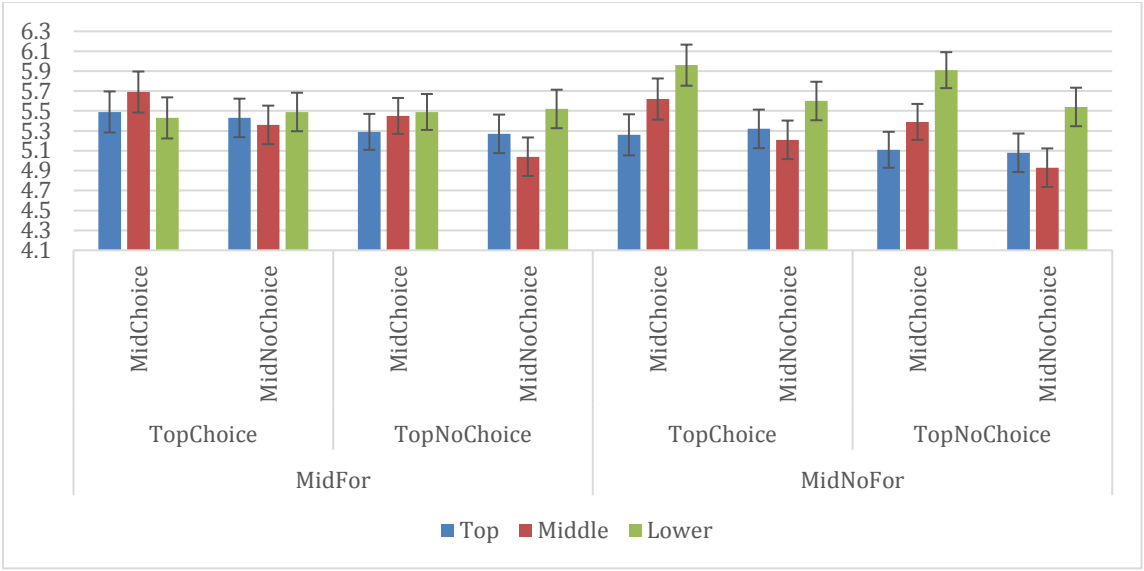


Figure F5a. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – participants who like big businesses more.

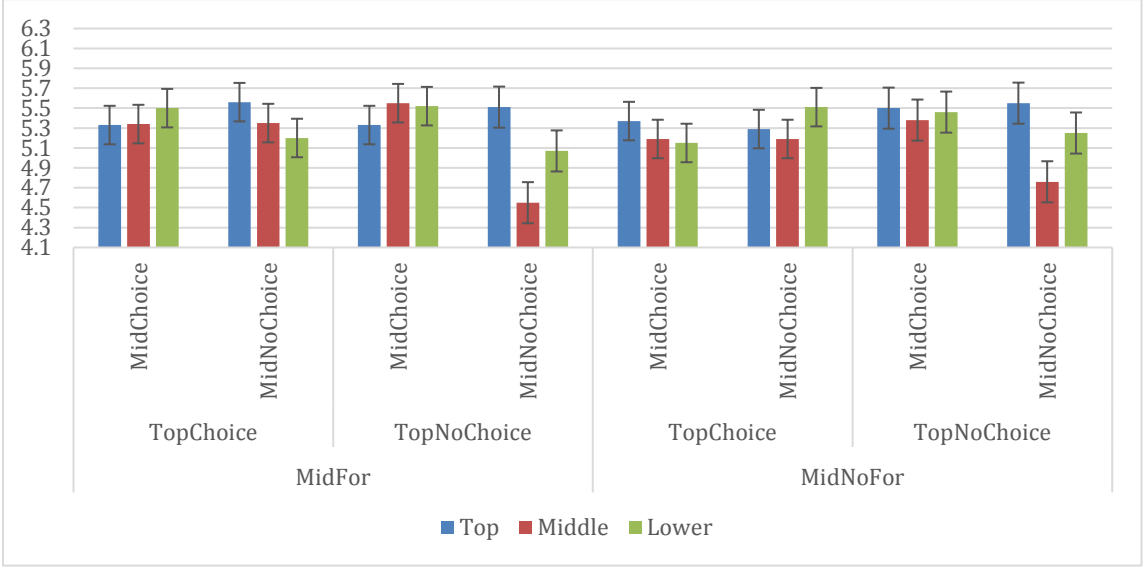


Figure F5b. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – participants who like big businesses less.

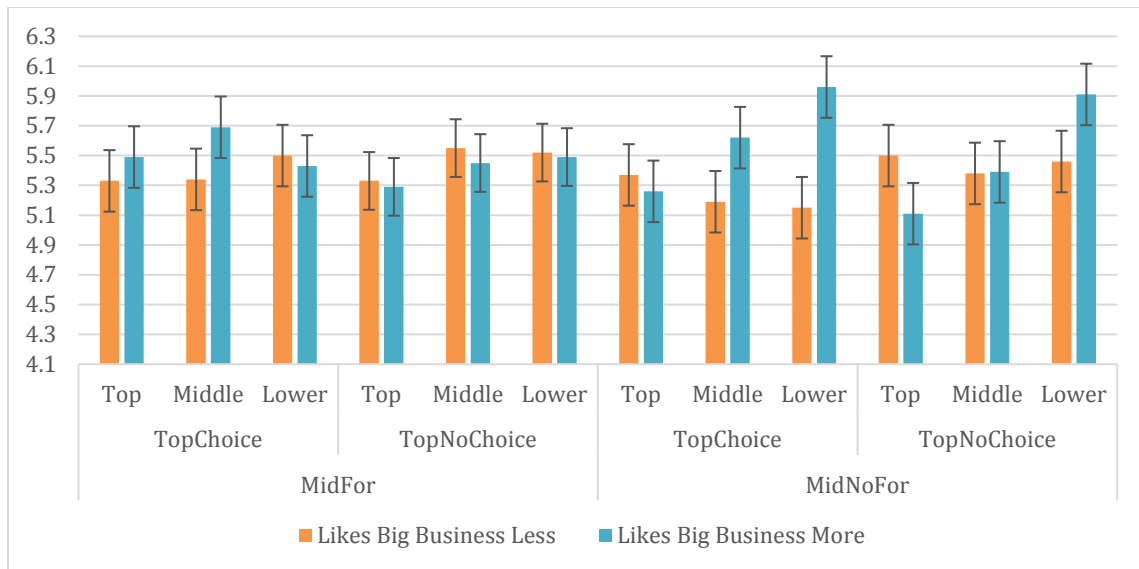


Figure F5c. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had a choice.

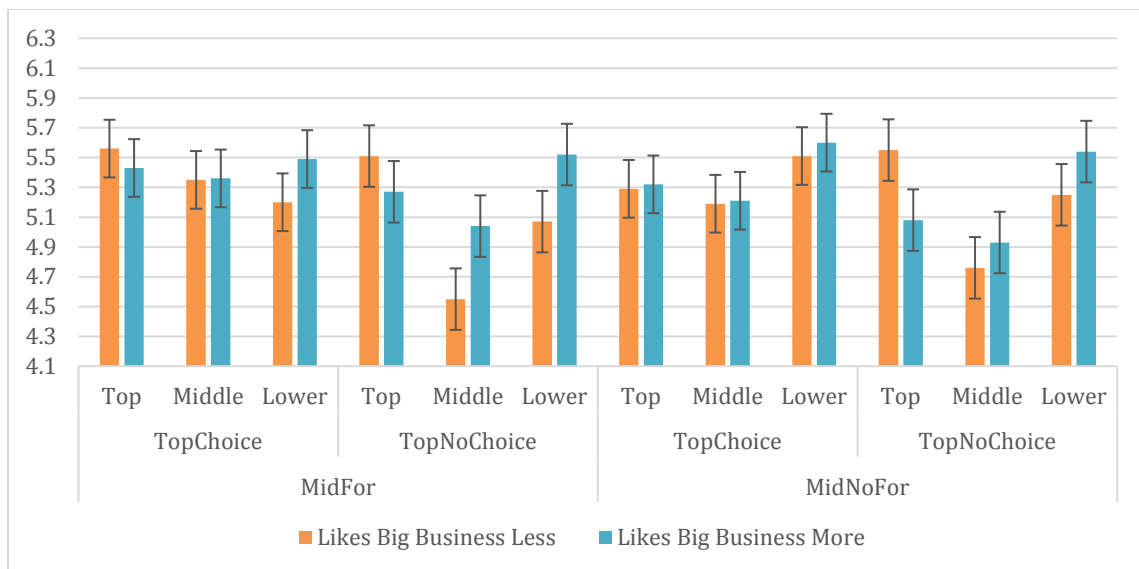


Figure F5d. Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Feelings toward Big Businesses 5-way interaction – examining individuals who like big businesses more or less in the conditions where the Middle Manager had no choice.

comparisons that occurred only for when the middle manager had foreseeability.

The middle manager (in both conditions) was less culpable than the top manager, when both the upper and middle managers had no choice, regardless of Middle Manager Foreseeability (Middle Manager No Foreseeability results: $M_{For} = 5.51$, $p = .0096$; M_{NoFor}

= 5.55, $p = .0036$; Middle Manager Foreseeability results: $p < .0001$; $p < .0001$, respectively). For the middle manager in just the foreseeability conditions, there were several additional findings in which the top manager, lower agent, and itself were found more culpable. The top manager was more culpable when the middle manager had foreseeability and no choice, and the top manager had a choice ($M = 5.56$), $p = .0010$. The top manager was also more culpable when the middle manager did not have foreseeability, but had a choice, and the top manager did not have a choice ($M = 5.50$), $p = .0050$.

The lower agent was more culpable when the top manager had a choice and the middle manager did not have a choice, regardless of Middle Manager Foreseeability ($M_{\text{For}} = 5.52$, $p = .0031$; $M_{\text{NoFor}} = 5.46$, $p = .0109$). The lower agent was also more culpable when the middle manager did not have foreseeability or a choice, and the top manager did have a choice ($M = 5.51$), $p = .0027$. Finally, the lower agent was more culpable when both the upper and middle managers had a choice and the middle manager had foreseeability ($M = 5.50$), $p = .0041$. When compared to itself, the middle manager was more culpable when he had foreseeability and both he and the top manager had no choice ($M = 5.55$), $p = .0017$. In other words, when the top manager has no choice and the middle manager has foreseeability, Middle Manager Choice is what drives the difference in culpability. When the middle manager had no choice, he will be less culpable than when he had a choice.

When comparing individuals low and high in Big Business, there were several conditions that resulted significant differences. First, when the middle manager had a choice but did not have foreseeability (regardless of Top Manager Choice – although the difference was more pronounced when the top manager had a choice), individuals high in Big Business held the lower agent more culpable than those low in Big Business (see Figure F5c). Second, when the middle manager had foreseeability and neither the upper nor middle managers had a choice, individuals high in Big Business held the middle manager and lower agent more culpable than their low Big Business counterparts (see Figure F5d). Third, when the middle manager did not have foreseeability and neither the upper nor middle managers had a choice, individuals low in Big Business held the top manager more culpable than those high in Big Business (see Figure F5d).

There were four significant interactions that did not include Actor and did not yield any significant differences within the +/-1 SD groups: Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business, $\chi^2(2) = 7.58$, $p = .0059$; Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 7.32$, $p = .0068$; Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 7.18$, $p = .0074$; Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 9.03$, $p = .0026$.

There were four significant six-way interactions for Feelings towards Big Businesses. Three of these interactions were best thought of as the combination of two previously discussed five-way interactions, and the fourth was best thought of as a

previously discussed five-way interaction with the inclusion of a sixth variable. First, there was a significant Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business interaction, $\chi^2(2) = 10.59, p = .0050$. This interaction was best thought of as the combination of the Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Big Business interaction and the Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business interaction. In general, the combining of these two interactions created a combined effect for the most extreme low culpability results. For the higher culpability conditions that these low culpability conditions were compared to, in the combined interaction they were at times slightly higher or lower than the separate interactions, but there was not a clear pattern.

For individuals high in Big Business, the two significantly lower results that drove the significant findings were lower than in the two separate models. First, the middle manager (when the top manager's actions were sufficient and the middle manager's actions were necessary and he had foreseeability and no choice, $M = 4.77$) was less culpable than his counterparts in the Middle Manager Sufficiency/Necessity ($M = 5.09$) and Middle Manager Choice ($M = 4.88$) models. Second, the top manager (when his actions were necessary and the middle manager's actions were sufficient, not foreseeable, and he didn't have a choice, $M = 4.78$) was less culpable than his counterparts in the Middle Manager Sufficiency/Necessity ($M = 4.88$) and Middle Manager Choice ($M = 5.00$) models. For individuals low in Big Business, the middle manager (when the top manager's actions were sufficient and the middle manager's actions were sufficient, he had foreseeability, and did not have a choice) was less culpable than his counterparts in the Middle Manager Sufficiency/Necessity ($M = 5.04$) and Middle Manager Choice ($M = 4.76$) models.

The next significant six-way interaction was found for Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Foreseeability by Middle Manager Choice by Big Business, $\chi^2(2) = 9.96, p = .0069$. This interaction was best thought of as the combination of the Actor by Top Manager Sufficiency/Necessity by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Big Business interaction and the Actor by Top Manager Sufficiency/Necessity by Top Manager Foreseeability by Middle Manager Choice by Big Business interaction. In general, the combining of these two interactions created a combined effect for the most extreme low and high culpability results that drove the significant findings. For the conditions that these extremely low and high culpability conditions were compared to, in the combined interaction they were at times slightly higher or lower than the separate interactions, but there was not a clear pattern.

For individuals high in Big Business, the lower agent (when the top manager's actions were necessary and had foreseeable, and the middle manager also had foreseeability and a choice, $M = 6.09$) was more culpable than his counterparts in the Middle Manager Foreseeability ($M = 6.01$) and Top Manager Foreseeability ($M = 5.70$) models. Also, the middle manager (when the top manager's actions were sufficient and foreseeable, and the middle manager did not have foreseeability or a choice, $M = 4.67$) was less culpable than his counterparts in the Middle Manager Foreseeability ($M = 5.02$)

and Top Manager Foreseeability ($M = 4.71$) models. For individuals low in Big Business, the middle manager (when the top manager's actions were sufficient and foreseeable, and the middle manager had foreseeability and no choice, $M = 4.41$) was less culpable than his counterparts in the Middle Manager Foreseeability ($M = 4.76$) and Top Manager Foreseeability ($M = 4.71$) models

The next significant six-way interaction was found for Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business, $\chi^2(2) = 14.63$, $p = .0007$. This interaction was best thought of as the combination of the Actor by Top Manager Sufficiency/Necessity by Middle Manager Foreseeability by Middle Manager Choice by Big Business interaction and the Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business interaction. In general, the combining of these two interactions created a combined effect. Whereas the previously discussed six-way interactions had elements in which some of the means appeared more extreme when the models were combined, all of the conditions found in this combined model were more extreme in terms of culpability, when compared to the two individual models.

For individuals high in Big Business, the top manager (when his actions were necessary and he had no choice, and the middle manager did not have foreseeability or a choice, $M = 4.79$) was held less culpable than the lower agent (when the top manager's actions were necessary and he had no choice, and the middle manager did not have foreseeability but had a choice, $M = 6.02$; $p = .0105$). These means were more extreme than those for the Top Manager Sufficiency/Necessity ($M = 5.00$ and $M = 6.01$, respectively) and Top Manager Choice ($M = 5.08$ and $M = 5.91$, respectively) models.

For individuals low in Big Business, there was one condition that resulted in the middle manager having significantly lower culpability than the top manager in certain scenarios. The low culpability condition for the middle manager occurred when the top manager's actions were sufficient and he had no choice, and the middle manager had foreseeability and no choice ($M = 4.39$). The middle manager (in this condition) was less culpable than the top manager in four conditions. First, the top manager was more culpable when his actions were necessary and he did not have a choice, and the middle manager had foreseeability and no choice ($M = 5.63$), $p = .0031$. Second, the top manager was more culpable when his actions were sufficient and he did not have a choice, and the middle manager did not have foreseeability or a choice ($M = 5.62$), $p = .0052$. Third, the top manager was more culpable when his actions were sufficient and he had a choice, and the middle manager had foreseeability and no choice ($M = 5.81$), $p = .0006$. Finally, the top manager was more culpable when his actions were sufficient and he had a choice, and the middle manager did not have foreseeability but did have a choice ($M = 5.67$), $p = .0075$. Again, all of the means for this combined model were more extreme than the respective means in the individual models.

The last six-way interaction was found for the Actor by Middle Manager Sufficiency/Necessity by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business interaction, $\chi^2(2) = 9.34$, $p = .0094$. This interaction was best thought of as the previously discussed Actor by Middle Manager Foreseeability by Top Manager Choice by Middle Manager Choice by Big Business interaction and the addition of Middle Manager Sufficiency/Necessity. For individuals