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# The Actor-Observer Effect and Perceptions of Agency: The Options of Obedience and Pro-Social Behavior

#### Samuel D. Downs

A dissertation submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

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Department of Psychology Brigham Young University June 2012

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#### **ABSTRACT**

The Actor-Observer Effect and Perceptions of Agency: The Options of Obedience and Pro-Social Behavior

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The actor-observer effect suggests that actors attribute to the situation while observers attribute to the actor's disposition. This effect has come under scrutiny because of an alternative perspective that accounts for anomalous finding. This alternative, called the contextual perspective, suggests that actors and observers foreground different aspects of the context because of a relationship with the context, and has roots in Gestalt psychology and phenomenology. I manipulated a researcher's prompt and the presence of a distressed confederate as the context for attributions, and hypothesized that actors and observers would differ on attributions to choice, situation, and disposition because of presence of a distressed confederate. Actors were presented with either a distressed or non-distressed confederate and either a prompt to leave, a prompt to stay, or no prompt. For example, some actors experienced a distressed confederate and were asked to leave while others experienced a non-distressed confederate and were asked to stay. Actors then made a decision to either stay and help the confederate or leave. Observers watched one of ten videos, each of one actor condition in which the actor either stayed or left (five actor conditions by 2 options of stay or leave). Actors' and observers' choice, situational, and dispositional attributions were analyzed using factorial MANOVAs. Actors and observers foregrounded the distressed confederate when making attributions to choice, situation, and disposition. Furthermore, observers' attributions to choice were also influenced by the actor's behavior. These findings support the contextual perspective since context does influence actors' and observers' attributions.

Keywords: Actor-observer effect, Obedience, Pro-social behavior, Foreground, Contextual

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# CONTENTS

Introduction	1
Scrutiny of the Actor-Observer Effect	4
Research Guided by the Contextual Perspective	8
Foregrounding of Choice and Options	10
Using Options to Address Attributions to Choice	12
Hypotheses	16
Method	18
Participants	18
Procedures	19
Measurements	25
Results	27
Descriptive Behavioral Outcome for Actors' Choice to Stay or Leave	27
Preliminary Analyses: Correlation Matrices, Box's M Test, and Levene's F Test	28
Choice, or Hypotheses One through Four	30
Dispositional Hypothesis, or Hypothesis Five	37
Situational Hypothesis, or Hypothesis Six	40
Discussion	45
The Contextual Perspective and Actors' and Observers' Attributions	46
The Importance of the Presence of a Distressed Confederate	60
The Contextual Perspective and the Actor's Behavior	62
Conclusion	66
References	70
Appendix A: Materials	74
Appendix B. Tables and Figures	80

# LIST OF TABLES

Table 1	80
Table 2	81
Table 3	82
Table 4	83
Table 5	84
Table 6	85
Table 7	86
Table 8	
Table 9	88
Table 10	89
Table 11	90
Table 12	
Table 13	92
Table 14	93

# LIST OF FIGURES

Figure 1	94
Figure 2	
Figure 3	
Figure 4	
Figure 5	
Figure 6	
Figure 7	100
Figure 8	
Figure 9	
Figure 10	103
Figure 11	104
Figure 12	
Figure 13	
Figure 14	107

The Actor-Observer Effect and Perceptions of Agency:
The Options of Obedience and Pro-social Behavior

A basic tenet of attribution theory is that people interpret human intentions differently depending on people's role in the social context, such as when a bystander infers that one person helps another because he or she is a nice person, whereas the helper says he or she helped because there was someone in need. Attribution theory has its roots in the work of Fritz Heider (1958) that stems from Gestalt psychology. Heider had considerable contact with Wolfgang Köhler, became friends with Kurt Lewin, and worked with Kurt Koffka at Smith College and was influenced by each (Rudolph & Reisenzein, 2008). However, Heider was most influenced by the neo-Kantian phenomenologist and Gestalt psychologist Alexius Meinong (Reisenzein & Rudolph, 2008; Rudolph & Reisenzein, 2008; Schönpflug, 2008) who was his dissertation advisor. Meinong connected phenomenology, a prevalent philosophical position in Germany, with psychology by identifying psychology as the scientific study of phenomenology (Schönpflug, 2008).

This phenomenological tradition focused on the intentional relationship between people and objects (briefly described later) that strongly influenced many Gestalt psychologists (Malle, 2008). For Heider (1958), the Gestalt understanding of the perception of visual stimuli could also be applied to the perception and understanding of social situations. Social situations, like visual stimuli, were contextual experiences that constituted perception, whether of other people or a visual field. In other words, just as the context of dots on a page provided the image of a Dalmatian, the context of human actions and personal judgments provide for interpretations of social interactions. Much of the early work in attribution theory relies on Heider's (1958) understanding of social situations as contexts for attribution.

Relying on Heider's contextual theory, Jones and Harris (1967) hypothesized that freely-chosen behaviors would cue dispositional attributions and non-freely chosen behaviors would cue situational attributions. In their study, participants read a pro-Castro essay. Some participants were told the essay reflected the author's opinion, and other participants were told that the author was instructed to write a pro-Castro essay and that the essay may or may not reflect the authors true opinions. For Jones and Harris, the important contextual cue was the nature of the behavior, either freely-chosen or not. Contrary to their hypothesis, Jones and Harris found that observers made dispositional attributions regardless of the nature of the behavior. In other words, observers ignored the cue that some behavior was due to the researcher's instructions and still made dispositional attributions (Jones & Harris, 1967).

A decade later, Ross (1977) coined the term *fundamental attribution error* to describe the findings of Jones and Harris (1967). The fundamental attribution error states that people overestimate the role of disposition and underestimate the role of the situation when making attributions (Ross, 1977; see also Myers, 2010). Only two decades after Heider's (1958) work on attributions from a Gestalt perspective, the fundamental attribution error presents attributions as primarily influenced by the tendency for every person in Western society to overuse dispositional attributions. In other words, the focus for Heider was the context, which included a person's disposition, while the fundamental attribution error changed the focus from context to people (and for cognitive psychology to people's internal processes) who typically overuse dispositional attributions.

During this transition away from Heider's (1958) attribution theory to a person-centered approach, Jones and Nisbett (1972) began social psychological research on the different attributions that seem consistent with actors' and observers' different roles, which is now known

as the actor-observer effect. The actor-observer effect is the notion that actors tend to attribute the cause of their actions to the situation while observers of actors are more likely to attribute an actors' actions to the actor's personality. As such, the actor-observer effect is directly connected to the fundamental attribution error because it identifies that even though people in general tend to overuse dispositional attributions, observers in particular overuse dispositional attributions. The actor-observer effect explains the difference in attributions using the role of a person, either actor or observer, instead of the context of the situation. In conjunction with the fundamental attribution error, the actor-observer effect explained attributions as primarily a result of people who had different roles.

Following this pioneering research by Jones and Nisbett, numerous studies have shown the actor-observer effect to be a pervasive and regular phenomenon in social attribution (see, e.g., Cunningham, Starr, & Kanouse, 1979; Fiske, 2010; Myers, 2010; Robins, Spranca, & Mendelsohn, 1996; Smith & Mackie, 2007). In 1982 Watson published a review of the research with the conclusion that the actor-observer effect was a pervasive phenomenon in social judgments. He also concluded that future research "should clarify the factors that enhance, eliminate, or reverse" (p. 698) the effect (see also, Robins et al., 1996). In response to Watson's (1982) call for further research, a number of psychologists have expanded the study of the actor-observer effect to include the following areas: the impact of the actor-observer effect on positive evaluations of the actor (Weary, Hill, & Jordan, 1984); the influence of visual perspective on the actor-observer effect (Onder & Oner-Ozkan, 2003); and the stability of the effect across trials with the same observer but different actors (Robins et al., 1996). It would appear that the actor-observer effect is a robust and consistent phenomenon across various contexts. In fact, the actor-observer effect is so well accepted in the discipline that textbooks in social psychology (see, e.g.,

Fiske, 2010; Smith & Mackie, 2007) and introductory psychology (Myers, 2010) uniformly report the effect.

#### **Scrutiny of the Actor-Observer Effect**

Recently, however, the actor-observer effect has come under scrutiny (Reeder, Monroe, & Pryor, 2008). There are at least three reasons for this scrutiny: observers make attributions to situation and disposition (Reeder et al., 2008), an alternative perspective that accounts for the research has been advanced (Reeder et al., 2008; Robins et al., 1996), and a meta-analytic review of research (Malle, 2006). First, research indicates that observers see *both* situational and dispositional factors that influence behavior instead of only using dispositional factors as the actor-observer effect predicts (Reeder et al., 2008). It appears that observers may use situational factors to make inferences about dispositional factors they perceive to have influenced behavior.

Second, an alternative perspective accounts for the actor-observer effect through the different contexts that actors and observers experience instead of solely through the roles of actor or observer (Reeder et al., 2008; Robins et al., 1996). This alternative perspective, as Robins et al. (1996) and Reeder et al. (2008) note, returns to Heider's (1958) understanding of attributions as contextually influenced. While Robins et al. (1996) or Reeder et al. (2008) do not explicitly identify other intellectual sources for the alternative perspective, other than Heider's work, Heider's work and Gestalt psychology were influenced by many different sources. One strong influence on the contextual perspective, through the Gestalt psychology of Heider, is phenomenology as Heider was heavily influenced by phenomenological thinkers, particularly Meinong (Malle, 2008; Schönpflug, 2008). Many Gestalt psychologists employed, sometimes explicitly and other times only implicitly, some key phenomenological ideas in their research and theorizing. As such, a brief discussion of phenomenology is necessary to distinguish the

alternative, or contextual, approach to the actor-observer effect from the more traditional, person-centered approach.

Phenomenologists, particularly those influential in Germany at the time of Heider, have been primarily concerned with the intentional relationship between people and objects (Husserl, 1983; Malle, 2008). For these early phenomenologists, human action was directed toward objects in the world (Fuller, 1990; Husserl, 1983). Through this directed action or intentionality, humans are in relationship with the world. For phenomenologists such as Husserl (1983), this directed action was consciousness. In other words, consciousness was the process of human action being directed at objects in the worlds and, thus, is the result of the intentional relationship between humans and the world (Fuller, 1990; Husserl, 1983). From this perspective, the meaning of objects comes from humans' actions toward those objects. For example, the meaning of the dots on a page are constituted through the interpretative, perceptual actions of the observers so that the dots on the page are (i.e., have the meaning of) a Dalmatian. For Heider (1958), the meaning of social relationships is also constituted through people's actions toward each other. From this phenomenological perspective, the world provides a context for human action and consciousness. For phenomenologists, this perspective describes the world of human experience including cars, trees, flowers, other people (Fuller, 1990) and attributions. From this perspective, the intentional relationship between the actor, the observer, and the situation are the source for attributions.

From this alternative perspective, the actor-observer effect is not due simply to the difference between being an actor or observer—as the actor-observer effect suggests—but to the difference in context that actors and observers experience. While the role of actor or observer is part of the context, the alternative perspective also includes other aspects of the context such as

the actor's behavior, the actor's and observer's personal history, and social norms. Robins et al. (1996), for example, explain that "actors and observers sometimes reach different conclusions about the causes of behavior because they often have different information available, different contexts for construing behavior, different histories in the situation, different goals, different perceptual orientations, and so on" (p. 388). In contrast, the traditional actor-observer effect suggested that actors and observers make attributions as if the context of the situation did not matter in that actors and observers would always attend to situational or dispositional cues, respectively. Researchers could provide a different visual perspective from which to view the research situation, but then actors would become observers watching their own actions and observers would become actors (see, e.g., Onder & Oner-Ozkan, 2003). In other words, the only way to make different attributions in the traditional actor-observer effect is to switch roles—the actor becomes the observer and the observer becomes the actor.

From the alternative perspective, however, actors and observers are capable—depending on the context—of making either situational or dispositional attributions: no role change need occur. From such a perspective, actors typically make situational attributions and observers typically make dispositional attributions; but actors, as actors, can and do make dispositional attributions depending on the context. For example, an actor may choose to vote against the majority in an election because he or she is conservative or liberal, a dispositional attribution. From the traditional perspective, the role of actor or observer is the reason for different attributions; from the alternative, or contextual, perspective, the context is the reason for different attributions.

While the traditional and contextual perspectives to the research about actors' and observers' attributions are similar, the traditional actor-observer effect emphasizes the role of

actor or observer. The emphasis in the contextual perspective is the contextually influenced experience of the person, whether actor or observer, that occasions different attributions. One example from the contextual perspective that accounts for the results of the research on the actorobserver effect and recognizes the contextual options that Robins et al. (1996) are referring to is the Multiple Inference Model (MIM), which claims that observers are attentive to situational cues as they infer an actor's motives and traits (Reeder et al., 2008). Theories from the contextual perspective, such as MIM, typically draw from Heider's (1958) distinction between actors and observers in which actors and observers have different foregrounds for their Gestalt perceptual field (see also, Reeder et al., 2008 & Robins et al., 1996). As seen in this example, the contextual perspective suggests that anything that changes the foreground of the perceptual field, such as a change in the context, will also change the inferences that actors and observers make. As a result, the inferences of actors and observers might not be as the traditional actorobserver effect predicts. For example, if the situation requires a decision between options to behave ethically or not, actors may make higher attributions to being an ethical person. These higher attributions would be due to the presence of an ethical choice which foregrounds for the actor his or her responsibility to be an ethical person. In other words, the presence of ethical options would draw the attention of the actor to, or foreground, his or her disposition. With the actor's ethical disposition in the foreground, the actor would be more likely to make higher attributions to disposition.

The third reason for increased scrutiny of the actor-observer effect is Malle's (2006) recent meta-analysis which concludes that the effect "may hold for Western participants when the actor-observer variable is manipulated between subjects and internal attributions of negative events are examined" (p. 903). In other words, the actor-observer effect may hold only for a

very narrow range of behaviors. This, however, is not congruent with how the actor-observer effect is typically portrayed in textbooks of psychology (see, e.g., Fiske, 2010; Myers, 2010; Smith & Mackie, 2007) or by past researchers (see, e.g., Jones & Nisbett, 1972; Ross, 1977; Watson, 1982; see also, Reeder et al., 2008 and Robins et al., 1996). However, in his meta-analysis, Malle (2006) also concluded that:

despite the lack of support for the traditional actor-observer asymmetry [effect], one should not yet abandon the intuition that actors and observers differ along a variety of psychological processes (information, attention, and motivation) that can in turn affect behavior explanations. The person-situation approach, however, is not the way to capture and document these effects. (p. 911)

If the person-situation approach, or the traditional actor-observer effect that differentiates between attributions to the person or the situation based on the role of actor or observer, is not the way to understand this effect, then perhaps the contextual perspective can better capture the differences between actors and observers.

#### Research Guided by the Contextual Perspective

In a recent study, Reeder et al. (2008) use the contextual perspective to research the situational cues (context) that give meaning to personality trait attributions. The purpose of the study was to draw "attention to situational forces surrounding the teacher's [in Milgram's famous study] aggression" (Reeder et al., 2008, p. 4). To analyze these forces, they studied attributions of intentional behavior to situational factors and dispositional traits using either hypothetical vignettes based on Milgram's (1963) study or clips from Milgram's (1965a) film *Obedience*. The participants were asked to rate the reasons for the teacher either disobeying or following the researcher's instructions to continue giving electric shocks along the three factors

of intentional behavior (e.g., wanting to hurt the learner), situational influences (e.g., the researcher's command), or personal traits (e.g., the teacher is sadistic).

Reeder et al. (2008) found that in both conditions—reading a vignette or watching clips from the video—observers saw the actor (in this case, the teacher) as behaving primarily due to situational factors rather than personal traits. In other words, the actor was seen as being motivated to the help the learner and to obey the researcher's command. Furthermore, the obedient actor was most often explained using situational beliefs, such as following the researcher's command, and the disobedient actor was most often explained using intentional behavior, such as to help with the research, and dispositional beliefs suggesting that context played a role in the participant's attributions. In other words, the observer used the context—the researcher's command, the task given, and the choice of the actor—to make inferences about the actor that were not dispositional. Both findings are inconsistent with the traditional actor-observer effect but consistent with the contextual perspective. In this case, the context was primarily influenced by the possibility of competing options to either help or obey in Milgram's experiment.

Since they relied on the videos of Milgram's research, Reeder, et al.'s (2008) were not able to address the difference between actors' and observers' attributions in terms of intentional behavior, situational influences, and personal traits. Furthermore, they did not directly test if the foregrounding of the choice (stopping vs. continuing the study) by the actor influenced the attributions made by an observer. The contextual perspective suggests that altering the context would alter attributions by actors, observers, or both actors and observers. A study that assesses actors' attributions and can distinguish between the two perspectives is needed. In other words, the research context needs to be altered in such a way as to distinguish between the two

perspectives. One way to alter the research context is to vary the level of perceived choice since accessibility of options may foreground situational factors and allow for different contexts that could result in different attributions by actors and observer than are traditionally predicted by the actor-observer effect.

### Foregrounding of Choice and Options

In a review of choice behavior, Fiske (1989) identifies accessibility of options as a factor in determining if choice is present. Accessibility of options is the potential for availability of actions such that a person, upon reflection, could specify alternative actions that were possible in a given situation. Fiske (1989) identifies levels of accessibility of options as influencing the presence of choice in both psychological and lay understandings of choice. If no alternative option can be specified, then choice is not present. If at least one alternative option could be specified, then choice is possible. In other words, at least two options are typically required for observers to make attributions to choice. Fiske (1989) is careful to state that, at the time of the action, conscious awareness of the different options is not necessary. There has been little, if any, further research on this understanding of choice.

In addition to numbers of options influencing choice, it is also possible that the more that plausible alternative options contrast, the more accessible these options will be. In fact, contrasts provide unique understanding through comparison because of their divergent nature (see, e.g., Slife, Reber, & Richardson, 2005). The dialectic created by two contrasts provides understanding for each side of the dialectic. For example, male and female anatomy is better understood because of the contrasts between the two. Thus, contrasting options highlight the necessity for choice by making the options more prominent, or foregrounded. I emphasize, as

Fiske (1989) did, that these options need not be consciously recognized at the time of the action but may still be more prominent in the experience of the situation.

Fiske (1989) also uses the notion of options as influences on foregrounding of choice in her discussion about choice behavior. In other words, alternative options can be considered constraints for behavior because alternative options indicate separate actions that constrain future behavior. A simple example may help to illustrate the point: assume that I have one dollar and need to buy something from the vending machine to immediately raise my blood sugar level. I can select a candy bar that costs a dollar or a smoothie drink that costs a dollar. I may not consciously recognize these alternatives, but the situation presents them to me. If I choose the candy bar, the drink is no longer available, and vice versa. Thus, my choice of the candy bar constrains future actions such as the possibility to buy the drink. Furthermore, my blood sugar level, the variety in the vending machine, and my preferences are also constraints on my behavior in that they limit my behavior. For example, I cannot wait to buy something for cheaper elsewhere because of my current blood sugar needs. Thus, choices present constraints on my behavior amid options. Some choices constrain behavior such that other options are still open (e.g., if I had two dollars, I could afford both the candy bar and the drink). Yet, as in the above example, some choices limit the accessibility of the other potential options. These choices—that limit other options—are contrasting options. As argued above, contrasting options foreground choice. Thus, foregrounding of choice can be varied by presenting contrasting options between which to choose.

Drawing implications from the contextual perspective, I suggested that the more foregrounded the possibility for choice is—the more options are in the foreground of the actor's and/or the observer's perceptual field—the more likely the actor and/or observer would be to

make situational and intentional attributions. Furthermore, actors would be more likely to have the situation in the foreground such that foregrounding of choice would have a greater effect for actors' attributions to choice than for observers' attributions to choice. This hypothesis follows from the contextual perspective to the actor-observer effect, which suggests that the context, or foreground of perception, matters in attributions. On the other hand, the traditional actor-observer effect suggests that attributions to choice will parallel each other, or that there will be no interaction effect, since actors consistently attribute to the situation (or choice in this case) while observers consistently attribute to disposition. The current study addressed both the issues of foregrounding of choice and the actor-observer effect by including attributions of actor's behavior by participant-actors and by varying the foregrounding of the actor's choice for both participant-actors and participant-observers.

## **Using Options to Address Attributions to Choice**

Following the Reeder et al. (2008) study, the foregrounding of choice can be influenced by two contextual possibilities: 1) a researcher's prompt to perform an action against 2) the experience of someone in need. Milgram's (1963) obedience study suggests that the physical presence of an experimenter giving commands leads to more obedience. In other words, proximity affects obedience because the closer the experimenter is to the situation, the more the command of the experimenter stands out compared to other options in the context. Milgram (1965b) concluded, "When the victim's position is held constant relative to the subject, and the authority is made more remote, the subject finds it easier to break off the experiment [i.e., disobey]. . . . Obedience to destructive commands is highly dependent on the proximal relations between authority and subject" (p. 66). Thus, the experimenter's prompt stands out, or

becomes more foregrounded, with proximity. Even if the prompt is not destructive, obedience may be increased by foregrounding the prompt.

I hypothesized that by varying the foregrounding of the experimenter prompt in my research, obedience would be affected, with more obedience following from a more explicit experimenter prompt. Furthermore, I hypothesized that a disobedient actor would reveal the options of the context to the observer more so than an obedient actor because disobedience may have foregrounded the choice for the observer since the actor was going against a preferred option. Thus, the researcher's prompt provided a constraint on the actor's choice and created an opportunity for disobedience, which, when manifested, may have foregrounded the situation for observers.

Batson's (1981) helping behavior study suggests that experience of a person in need also influences behavior as a contextual option in that some people are more likely to help for prosocial reasons while other people are likely to leave to relieve the personal distress caused by the experience of a person in need. A person feels distress when he or she experiences another person in need. This distress can lead to one of two different responses: the person may feel empathy for the distressed person and help, or the person may try to relieve his or her distress by escaping the situation without helping. In the first option, the person is motivated by empathy; in the second option, the person is motivated by a self-interested desire to relieve personal distress caused by the experience of another person in need. In other words, the more that people perceive a need for help, the more likely they feel personal distress, which results in them being more likely to help given they view it possible to help. Furthermore, people are more likely to help when the possibility of relieving personal distress by leaving is low. In other words, if leaving has little cost for the individual, then the person is more likely to leave (Batson, 1981).

By varying the context of situation, helping behavior will be influenced, with helping increasing as the cost for leaving, personal distress, and empathy are increased. Taken together, these two lines of study suggest a progression in the foregrounding of choice according to the foregrounding of options as I varied the foregrounding of the researcher's prompt and the experience of a person in need.<sup>1</sup>

Specifically for the actors, I expected attributions to choice would be lower for situations where the actor's attention was not likely drawn toward choice (low foregrounding) and higher for situations where the actor's attention was more likely on the choice (high foregrounding). Attention here was not necessarily explicitly recognized attention. Thus, the actor may not have recognized that his or her attention was on the choice (see Fiske, 1989, for a discussion about choice and implicit or explicit attention). When the option of obedience to the researcher's prompt and the option to help encouraged opposing behaviors, I expected that the foregrounding of choice would be highest because the contrasting options would have made the choice more foregrounded. In other words, the opposing options were more likely to act as constraints on behavior that required a decision to resolve the situation. The need to resolve the situation was more likely to be attended to by the actor so that the situation could be resolved.

Next, I expected when there was no direct prompt from a researcher, but only the option of helping a distressed person, the foregrounding of the choice would be second highest because the actor still faced a choice to help or not but without the direct prompt from the researcher to direct attention to the option of leaving. This context did not include explicitly opposing options because the researcher would not provide any prompt. Thus, the option to leave would still be available, but there would not be a researcher's prompt to highlight that option. The actor would

<sup>&</sup>lt;sup>1</sup> The implications of this study for obedience and helping behavior are beyond the scope of this dissertation and, therefore, will not be included.

still need to choose between two opposing options (helping or leaving), but one of the opposing options would not be directly highlighted in the context.

Then, I expected when the researcher prompted the participant to help and there was the experience of a person in need, the foregrounding of the choice would be third highest because there would not be contrasting options, whether implicit or explicit, yet the choice to leave and immediately alleviate personal distress would nonetheless be present. Batson's (1981) research suggests that leaving without helping also alleviates personal distress and that some people make this choice. Thus, leaving was an option encouraged by the desire to alleviate personal distress even though this option may not have been as viable because of the researcher's prompt. With the researcher's prompt to help, the social cost of leaving would have increased and leaving would not be as viable an option for as many actors as when there was no researcher prompt or the researcher asked the actor to leave. Since an opposing option would not be as viable, actors would not recognize the choice in this situation as much as in the other two situations previously described. However, because there still was a viable choice (though less viable than the previous two situations) to leave, this situation still had opposing options. In fact, for all three of the situations described, there were varying levels of opposing options to stay or leave. Throughout this dissertation, these three situations are referred to as situations that have opposing options whereas the next two situations described are referred to as situations in which there was only one viable option.

Finally, I expected when the researcher's prompt was the only constraint on behavior because there would be no experience of a person in need, the foregrounding of choice would be the lowest because there was no contrasting options or possibility of alleviating personal distress by doing other than what the researcher asked. In other words, the actor would still have the

option to stay in the research setting (or leave if the prompt was to stay) but would not likely recognize that choice because there was no reason to make that choice. In other words, there would be one option that unilaterally dominates this context.

In summary, attributions to choice would be highest in any context when there were explicitly opposed options, next highest in contexts when there were implicitly opposed options, somewhat lower in contexts when there were congruent options, and lowest when there were no opposing or congruent options. Table 1 summarizes the order of attributions to choice and briefly recapitulates the justifications for the order.

## **Hypotheses**

**Choice.** I first discuss three hypotheses for attributions to choice.

*Hypothesis one.* To summarize the section above, I expected attributions to choice would be highest in situations when there were explicit opposed options, next highest in situations when there were ambiguous options, somewhat lower in situations when there were congruent options, and lowest when there were no opposing or congruent options. In other words, I expected attributions to choice would be higher for conditions in which there were opposing options than in situations in which there was only one viable option.

*Hypothesis two.* Furthermore, I expected this same pattern of attribution for observers even though actors were more likely to recognize choice in any given situation. However, when assessing this hypothesis, I also considered the influence the actor's choice had on observers' attributions. Observers watched an actor who either left or stayed, and which action the actor did might have influenced observers' attributions to choice.

*Hypothesis three.* I expected that actors would be more likely to make attributions to choice in a given situation than observers. This prediction is congruent with the contextual

perspective of the actor-observer effect that suggests that differing foregrounds create differing attributions. Actors would be more likely to recognize a choice because the situation would be foregrounded more for them than for observers who would have the actor they were watching as the foreground.

*Hypothesis four.* I expected there would be an interaction effect between foregrounding of choice and actors/observers because foregrounding choice would influence actors differently than observers since actors would make progressively more attributions to choice compared to observers as foregrounding of choice increases (see Figure 1). Actors were more likely to have the situation in the foreground such that foregrounding of choice might have a greater effect for actors' attributions to choice than for observers' attributions to choice.

Disposition, or hypothesis five. To partially test the traditional actor-observer effect, I hypothesized that there would be a difference between actors and observers for attributions to dispositional traits. However, because the literature conflicts concerning the outcome of attributions to dispositional traits, I did not hypothesize a direction for difference between actors and observers on attributions to dispositional traits. If actors made more attributions to dispositional traits than observers, then the traditional actor-observer effect would have been undermined and the contextual perspective supported. If observers made more attributions to dispositional traits than actors, then the traditional actor-observer effect would have been supported if observers did not make attributions to the situation as much as actors. I expected all three attributions to be influenced by the foregrounding of choice because I expected the context in which attributions were made to be important in constraining certain attributions.

**Situation, or hypothesis six.** Finally, I also expected actors would be more likely to make attributions to the situations than observers. At first this hypothesis may seem

contradictory to hypothesis two: actors would make more attributions to choice *and* to the situation. However, as predicted by the contextual perspective to the actor-observer effect, attributions to choice and situation are not necessarily incongruent because actors may recognize that the situation allowed the possibility for choice. In other words, actors might have made attributions to the situations because they recognized that the options of the situation allowed for the possibility of choice. Actors might have been able to recognize the situational options—and make attributions accordingly—while still recognizing their choice in the situation—and make attributions accordingly. In fact, this finding would have provided support to the contextual perspective of the actor-observer effect because context —in this case, situational options—would have influenced attributions—in this case, attributions to choice.

#### Method

#### **Participants**

Actors. Actors were recruited from a student population at Brigham Young University using the SONA system, an online system designed to allow students to find and participate in research. There were 150 actors with 30 actors per condition. The average age of actors was 21.4 (SD = 4.1). Twenty-seven percent of actors were freshmen, 33.3% were sophomores, 19.3% were juniors, 18.7% were seniors, and 1.3% were graduate-level students. Half of the actors were female. Eighty-three percent of actors were white, 6.7% were Asian, 4.7% were Hispanic, 1.3% were Native American, 0.7% were African-American, and 3.3% were Other (two identified as Asian/White, one as biracial, one as Hawaiian/Japanese/Peruvian, and one as South Asian). Ninety percent of actors were single, 8.7% were married, and 1.3% were divorced or widowed. It may also be important to note that almost half (43.3%) were taking their first psychology class (most likely an introductory psychology class) and almost three-fourths

(74.0%) had never taken a social psychology class. There were no statistically significant differences between conditions for any actor demographic data.

Observers. Observers were recruited from a student population at Brigham Young University using the SONA system as well. There were 319 observers with roughly 30 observers for each of the ten conditions (see Table 2 for exact number of participants per condition). The average age of observers was 21.13 (SD = 3.42). Thirty percent of observers were freshmen, 23.2% were sophomores, 21.6% were juniors, 25.4% were seniors, and 0.3% was graduate-level students. Fifty-three percent of the observers were female. Almost 90% of observers were white, 4.4% were Hispanic, 2.8% were Asian, 1.3% were African-American, 0.9% were Pacific Islander, 0.3% were Native American, and 0.6% were Other (one identified as African and one as Black not African-American). Eighty-four percent of observers were single, 14.7% were married, and 1.6% were divorced or widowed. It may also be important to note that 35.2% were taking their first psychology class (most likely an introductory psychology class) and 60.7% had never taken a psychology class.

There was no difference between conditions for any of the observer demographic information except age: participants in the unilateral help options condition (m = 22.16, SD = 4.93) were significantly older than participants in the congruent (m = 20.31, SD = 2.26) and explicit opposed (m = 20.46, SD = 2.52) options conditions (p = 0.025 and p = 0.046, respectively).

## **Procedures**

**Actors.** The researchers and confederate were given a script (see Appendix A) and trained on their roles so that the procedure would be consistent between researchers and between conditions, unless otherwise specified by the research design. After signing up through SONA,

all actors were brought into the same room with three chairs around a table. The actors sat in the chair to the right of the researcher, and a confederate sat in the chair to the left of the researcher so that three of the four corners of the table had a chair with a person sitting in it. For all five conditions, actors were informed they were participating is a study about the effects of punishment on learning. The first three conditions had similar procedures except for one difference and the fourth and fifth conditions had procedures that were similar to each other, but differed from the first three conditions' procedures. See Table 2 for a graphical presentation of conditions for actors. This design was based on the paradigmatic method employed by Batson (see, e.g., Batson et al., 1981) and others (see, e.g., Reeder et al., 2008). The procedures for the first three conditions were as follows.

The first three conditions. The confederate arrived late so that the actor believed the confederate was another participant. The researcher told both individuals, the actor and the confederate, about the procedure as if the actor and the confederate were participants. The researcher informed them that one participant would watch as another participant completed a learning task. The researcher informed both individuals that while one person, who the researcher referred to as the subject, would complete the learning task, the other person, who the researcher referred to as the watcher, would record what he or she thought were the thoughts and feelings of the person doing the learning task. The actor was only referred to as the watcher for the purposes of the research design; at no time did I collect data about the observations of the actor. The actor is an actor because, as will be seen shortly, the actor would make a decision between behaviors at the end of the research situation.

Once both individuals understood the procedure, the actor and confederate drew lots to see who would be the subject and perform the learning trial and who would be the watcher. The

drawing of lots was rigged so that the participant-actor was always the watcher and was assigned to record the thoughts and feelings of the person doing the learning task, who was the confederate. Then the researcher used the electric stimulation devise (actually a massage device that uses electricity to stimulate muscles) to give the actor one mild electric shock while indicating that the researcher wanted the actor to understand what the electric shock would feel like to the other person (i.e., the confederate).

At this point, the researcher began the learning trials. The confederate was asked to repeat a list of words read by the researcher. If the confederate repeated the list correctly, a new list, one word longer than the previous list, was read. If the confederate repeated the list incorrectly, either a wrong word or the wrong order of words, then the researcher gave the confederate an electric stimulation and read a new word list of the same length. The trials were actually a deception used to set up the research scenario. The confederate did not receiving any electric shock and the trials proceeded according to a script. As the trials continued, the confederate became increasingly agitated (as described in the script; see Appendix A) until finally the confederate, extremely agitated, divulged a story about how she was electrocuted in a childhood accident and had a fear of electrocution. At this point, the researcher stopped the trial and turned toward the actor. The researcher then indicated that the actor could choose between two options: to leave or to stay and take the place of the confederate. It is this action—deciding to stay or leave—about which the actor made attributions. From the time the confederate arrived to this point in the research, the entire process took approximately ten minutes. From this point onward, the first three conditions diverged from each other.

The first condition. In the first condition—called the explicit opposed options condition—after informing the actor of the two options, the researcher explicitly encouraged the

actor to leave by saying, "I would really like you to leave." This condition was called the explicit opposed options condition because the option to stay and help the confederate was in opposition to the option of the researcher's prompt to leave.

The second condition. In the second condition—called the ambiguous options condition— after informing the actor of the two options, the researcher did not encourage the actor to choose either option. This condition was called the ambiguous options condition because the option to stay and help the confederate was in opposition to the option of leaving because the research is over. However, the option to leave because the research is over was implicit because the researcher did not explicitly ask the actor to leave as in the explicit opposed options group.

The third condition. In the third condition—called the congruent options condition—after informing the actor of the two options, the researcher encouraged the actor to stay by saying, "I would really like you to stay and help." This condition was called the congruent options condition because the option to stay and help the confederate was congruent with the option of the researcher's prompt to stay and help.

The fourth and fifth conditions. The fourth and fifth conditions diverged from the first three conditions in that there was no experience with a confederate reacting negatively to receiving electric shocks. Instead, in these two conditions the actor was brought to the same room with the same set up (i.e., three chairs around a table) as all other actors. The researcher proceeded to deliver the learning trials to the confederate, including the electric stimulation. However, the confederate did not react negatively to the learning trial. Instead, the confederate simply finished the trial. The purpose of these two conditions was to provide a situation in which there was a researcher's prompt to behave in a particular way without the presence of a

distressed confederate to assess the impact of the presence of a distressed confederate on attributions to choice, disposition, and situation. I expected attributions to choice to be influenced by the presence of a distressed confederate. To determine if this is the case, actors and observers also needed to make attributions without the presence of a distressed confederate, but with all the other aspects of the research design, including a researcher's prompt. Thus, the actors in these two conditions were also given two options: to stay and take the place of the confederate or to leave. It is this decision about which actors in these two conditions were asked to make attribution. At this point, the fourth and fifth conditions diverged from each other. In the fourth condition, after informing the actor of the two options, the researcher encouraged the actor to leave by saying, "I would really like you to leave." In the fifth condition, after informing the actor of the two options, the researcher encouraged the actor to stay by saying, "I would really like you to stay and help." These two conditions were collectively called the unilateral options conditions because the option to do other than what the researcher indicated was not likely to be chosen by the actor. In other words, there were two possible options in these two scenarios—stay or leave—but the option to do other than requested by the researcher was not plausible given the situation. The fourth condition was called the unilateral leave options condition, and the fifth condition was called the unilateral stay options condition, to distinguish the two groups from each other.

All five conditions. At this point in the study the procedure for all five conditions was the same. All five conditions did as follows: the researcher recorded the decision of the actor to either stay or leave and informed the actor that the trials did not, in fact, need to continue.

Instead, the researcher gave the actor (and the confederate) some questions to answer about his or her experience (see the section titled Measurements). At this time, actors in all five conditions

were asked to make attributions about their decision to stay or leave. After the actor completed the questionnaire, he or she was fully debriefed, including being informed of the deception, introduced to the confederate as a confederate, provided information of available counseling services, and dismissed.

Each actor was randomly assigned to one of the conditions so that there were 30 actors per condition.

**Observers.** Using confederates I filmed ten videos that corresponded to the five conditions and the two actions possible—staying or leaving (see Table 2). These videos were posted on the Internet in such a way that only participants had access to them (see Measurements subsection for a description of videos). All observers accessed the study via the Internet and were directed to a survey-hosting website, qualtrics.com. Once they had been directed to the study, observers were asked to provide consent to participate and shown one of ten videos that correspond to the five conditions and one of the two actions. For example, the explicit opposed options condition, in which there was a distressed confederate and a researcher prompt to leave, produced two videos: in one video the actor left and in the other video the actor stayed. In this same way, two videos corresponding to the actor's action were created for each condition. Observers then answered 15 questions about the video and some demographic questions (see Measurements subsection). Observers were asked to make attributions to a confederate's behavior to either stay and take the place of another confederate or leave. In this way, observers were making attributions about the same action—deciding to stay or leave—to which actors were making attributions. Finally, observers read a debriefing and exited the survey.

#### Measurements

Assessing demographics. The demographic questions for both actors and observers consisted of the typical demographic questions such as sex, age, ethnicity, etc. Furthermore, participants were asked how many psychology and social psychology classes they had taken and whether they planned on pursuing a graduate degree related to psychology. See Appendix A for all demographics questions.

**Assessing motives.** Motives were broadly defined for this study as reasons for doing a behavior. Consistent with actor-observer literature, there were three types of motives being considered for this study: choice, situational, and dispositional (see, e.g., Reeder et al., 2008). Choice motives were interpreted as any reason in which the person realized he or she had a choice. Situational motives were interpreted as any reason in which the person felt the situation demanded a certain action. Dispositional motives were interpreted as any reason in which the person felt he or she did a certain action because he or she was the type of person who does that action. Motives were assessed using 14 plausible reasons for actions given the experimental situation. For example, "I did what I did because the researcher asked me to." See Appendix A for all 14 possible motives. Each motive was rated by all actors on a 7-point Likert-type scale. For each question, higher scores indicated higher attributions. This assessment was patterned from research by Reeder et al. (2008), who had observers rate motives for the participant's behavior in the Milgram (1963) obedience study. The motives were specific for their research design just as these motives were specific for my research design. As such, the Reeder et al. (2008) did not include the questions they used in the article. The 14 motives I used were designed to fit into one of three categories—choice, situational, and dispositional.

Observers assessed the actor's motives using the same questions except that the wording was slightly modified to account for the observers' different perspective. For example, observers answered the question, "The watcher did what she did because the researcher asked her to," instead of, "I did what I did because the researcher asked me to." I referred to the actor as "the watcher" because that was the role the researcher assigned to the actors. All questions were altered in this way.

In keeping with the practice outlined by Cramer and Bock (1966) to avoid inflating the rate of Type I error, five MANOVA analyses were run for the six hypotheses. Each MANOVA included the questions from a particular category. Thus, the three MANOVA analyses for the choice category included all four choice questions as dependent variables. The MANOVA for the dispositional category included all five dispositional questions, and the MANOVA for the situational category included all five situational questions. Each question was entered as a dependent variable in its respective MANOVA because each question asked about a different aspect of the context. That is, no question was intended to ask, with different wording, about the same aspect of the context as another question. Instead, each question assessed a different motive specific to the research situation and provided an indication of how actors and observers attributed to each specific motive. If a MANOVA provided significant results, item-level ANOVAs were run as well as post-hoc tests.

**Observer videos.** The videos were filmed with the same confederate who took part in the actor portion of the study. One of the trained researchers from the actor portion was also used as the researcher in the video. For the role of the actor, who was called the watcher in the video, another female confederate was used. All confederates followed a script (see Appendix A). Each of the five conditions was filmed twice, corresponding to the actor's two choice

options. For example, the explicit opposed options condition was filmed twice: in one case, the confederate actor decided to stay; and in the other, the confederate actor decided to leave. Both choices were filmed for the five conditions for a total of ten videos. Each observer was randomly assigned to watch only one of the ten videos.

#### Results

# Descriptive Behavioral Outcome for Actors' Choice to Stay or Leave

To describe the choice by the actor to either stay or leave, Table 3 presents descriptive data concerning the number of actors who stayed and left in each condition. In the unilateral help, congruent, and ambiguous options conditions, almost every actor stayed (29/30, 29/30, and 28/30 respectively); in the unilateral leave condition, almost every actor left (25/30); and in the explicit opposed options condition, actors were divided almost evenly between those who stayed and those who left (13 to 17 respectively). Given these data, it seems that foregrounding choice influenced the actor's decision for the explicit opposed options condition since there were two options in this condition, and actors chose either option about fifty percent of the time.

Given the disparity between staying and leaving between conditions, it may be that actors choices differed by condition. As a descriptive measure, the behavioral outcomes provide a sense of how actors used their choice. If actors' behavior was consistent with the direction of the given research condition (e.g., the researcher prompted them to leave and there was no distressed confederate present), it may be that actors' choice was constrained to some degree by the research conditions, such as the researcher's prompt, regardless of the actors' attributions to choice. In contrast, if actors did not behave in a manner that was consistent with the constraints of the research condition (i.e., some left and some stayed), then actors' choice may not have been as constrained by the research conditions regardless of their attribution to choice. Since the

outcomes suggested that actors' behavior might have been different by condition, I ran a chi-square analysis to assess if actors' behavior differed in the distribution of those who stayed and those who left from what would be expected for two choices (i.e., 50% staying and 50% leaving).

The chi-square analysis shows that the percentage of actors who stayed and those who left was significantly different than expected ( $\chi^2$  [4, N = 150] = 77.89, p < 0.001) indicating that more actors stayed for the ambiguous, congruent, and unilateral help options conditions than expected, and that more actors left for the unilateral leave options condition than expected. Thus, the presence of a researcher's prompt or distressed confederate influenced the ambiguous, congruent, and unilateral options conditions as expected. Furthermore, for the explicit opposed options conditions, the presence of opposing options seems to have influenced actor's behavior such that most actors did not follow the researcher's prompt as in the other conditions. This finding seems to suggest that while actors in most of the conditions followed the researcher's prompt regardless of the distressed confederate, actors in the explicit opposed options condition had both options, to stay or to leave, possible. Since actors in the explicit opposed options condition chose each option about half the time, this suggests that actors in this condition had both options as possible options in this condition, but not in the other conditions.

## Preliminary Analyses: Correlation Matrices, Box's M Test, and Levene's F Test

Correlation matrices. Prior to conducting each MANOVA, I assessed if the dependent variable for each MANOVA (in this case, the questions associated with choice, disposition, and situation) were moderately related (i.e., had correlation coefficients from 0.20 through 0.60; see Meyers, Gampst, & Guarino, 2006) using a correlation matrix. For each MANOVA, the dependent variables were moderately correlated, suggesting the appropriateness of MANOVA

since this analysis controls for the variance shared between dependent variables. Tables 4 through 8 present the correlation matrices for the five different MANOVAs.

Box's M test. Box's M test assesses the assumption of MANOVA that the covariance matrices of the dependent variables is the same across groups. Thus, prior to conducting MANOVAs, I assessed equality of the covariance matrices using Box's M test. If the test value is significant at p < 0.001, then the covariance matrices are not equal (Tabachnick & Fidell, 2007). However, Box's M test is highly sensitive. If Box's M test is significant and the sample cell sizes are equivalent, the robustness of the MANOVA is expected and Box's M test can be disregarded (Tabachnick & Fidell, 2007). Furthermore, if Box's M test is significant and the sample cell sizes are not equivalent, Pillai's trace should be used instead of Wilks' Lambda to maintain the robustness of the MANOVA test (Tabachnick and Fidell, 2007). Each of the five MANOVAs met these requirements, so the robustness of each MANOVA test is expected. I report Pillai's trace instead of Wilks' Lambda where necessary.

Levene's test. If a particular analysis had a significant MANOVA, I ran ANOVA test to determine which dependent variables differed significantly by group. However, before running ANOVAs for each significant MANOVA, I assessed the homogeneity of variance using Levene's F test for each question. Most of these tests were significant at p < 0.05; however, Howell (2009) reports that the ANOVA will still be robust if none of the standard deviations are four times larger than the corresponding smallest standard deviation. As seen in Tables 9 through 12, this requirement was met for each significant question that failed Levene's F test. For this reason, I interpreted the ANOVA results for significant questions as any other robust ANOVA result would be interpreted.

# Choice, or Hypotheses One through Four

There were four hypotheses for attributions to choice. These four hypotheses were addressed using three different analyses.

Hypothesis one. I expected actors' attributions to choice to be highest in situations when there were explicit opposed options; next highest in situations when there were ambiguous options; next highest in situations when there were congruent options; and lowest when there were no opposing or congruent options. In other words, I expected attributions to choice to be higher for conditions in which there were competing options than in situations in which there were no competing options. To assess this hypothesis, I used a one-way between-groups MANOVA using the actor data only with the four choice questions as dependent variables.

The MANOVA analysis indicated that there was no significant difference between conditions for actors' attributions to choice (Wilks' Lambda = 0.89, F (16, 434.46) = 1.11, p = 0.34). Counter to my hypothesis, the results are inconclusive concerning the influence of the presence of opposing options on actors' attributions to choice, but suggest that foregrounding of choice did not influence actors' attributions to choice.

Hypothesis two. I expected observers' attributions to choice to follow the same pattern as actors' attributions to choice. Namely, I expected observers' attributions to choice to be highest in situations when there were explicit opposed options; next highest in situations when there were ambiguous options; next highest in situations when there were congruent options; and lowest when there were no opposing or congruent options. In other words, I expected attributions to choice to be higher for conditions in which there were competing options than in situations in which there were no competing options. However, when assessing this hypothesis, I also considered the influence the actor's behavior has on observers' attributions. Observers

watched an actor either leave or stay, and which action the actor displayed may have influenced observers' attributions to choice. To test this hypothesis, I used a between-groups factorial MANOVA with a 2 (stay or leave) x 5 (five conditions) design with the four choice questions as dependent variables.

*MANOVA results.* The MANOVA indicated that observers did vary on attributions to choice by condition, Wilks' Lambda = 0.90, F(16, 935.48) = 2.04, p = 0.009,  $\eta = 0.04$ . Furthermore, it indicated that observers who watched an actor leave made higher attributions to choice than did observers who watched an actor stay, Wilks' Lambda = 0.96, F(4, 306) = 3.29, p = 0.01,  $\eta = 0.03$ ). It also indicated that there was an interaction effect with the difference between observers who saw an actor stay and those who saw an actor leave operating as a function of condition, Wilks' Lambda = 0.82, F(16, 935.48) = 3.84, p < 0.001,  $\eta = 0.05$ , which helps in interpreting why observers who watched an actor leave made higher attributions to choice since this difference depended on condition. The significant MANOVAs suggested that follow-up univariate ANOVAs were warranted (Tabachnick & Fidell, 2007).

*Main effect by condition*. For the main effect of condition, one question—"The watcher made the choice that she did because the need for a choice was prominent"—was significant  $(F[4, 309] = 6.10, p < 0.001; \eta = 0.07)$  indicating that observers did differ by condition on attributions to the need for a choice. The pattern of means again roughly followed the predicted pattern since observers who see an actor faced with two opposing options due to the distressed confederate make higher attributions to the need for choice being prominent than observers who see an actor in the two unilateral options conditions (see Table 13). This suggests that observers' attributions to choice, specifically the need for a choice, were influenced by the presence of opposing options. Furthermore, this pattern of means suggests that the presence of *explicitly* 

opposed options, such as in the explicit opposed options condition, was not as important as the presence of opposing options. Thus, this pattern of means suggests that when there are opposing options, regardless of their explicitness, choice was foregrounded for observers.

Since this particular question did not have a significant interaction effect, I performed post hoc analyses. Using Fisher's least significant difference (LSD) test, I assessed mean differences for this question. I used Fisher's LSD test, the most sensitive post hoc test, because the MANOVA test protects against Type I error. As can be seen in Table 13, observers in the ambiguous options conditions (M = 5.11, SD = 1.58) made significantly higher attributions to the prominence of the choice for the actor than observers in the unilateral help (M = 4.23, SD = 1.60)and unilateral leave (M = 3.87, SD = 1.80) options conditions (p = 0.002 and p < 0.001, respectively). These results support the hypothesis that observers who saw an actor experience a distressed confederate and researcher's prompt (in the condition without an explicit prompt) made higher attributions to the need for a choice than observers who saw an actor experience only one viable option. Furthermore, for this question, observers in the explicit opposed options condition (M = 4.79, SD = 1.37) made higher attributions to the choice being prominent than observers in the unilateral leave options condition (p = 0.001; see Table 13), indicating that observers who saw an actor experience a distressed confederate and an explicit prompt to leave made higher attributions than observers who saw an actor experience a researcher's prompt to leave without a distressed confederate. It seems that opposing options, whether implicit or explicit, due to a distressed confederate and a researcher's prompt increased attributions to choice for observers.

*Main effect by stay/leave*. Since I also expected the actor's behavior to influence observers' attributions to choice, I present the results for observers who saw an actor stay and

those who saw an actor leave. Observers who saw an actor leave made higher attributions to choice than observers who saw an actor stay for three of the four choice questions: "The watcher made the decision that she did because she realized she had a choice" (F[4, 309] = 7.95, p =0.005;  $\eta = 0.03$ ), "The watcher made the decision that she did because she weighed the pros and cons of each decision and came to a conclusion" (F[4, 309] = 9.14, p = 0.003;  $\eta$  = 0.03), and "The watcher made the decision that she did because I recognized, in the situation, that she can make choices" (F[4, 309] = 5.27, p = 0.02;  $\eta$  = 0.02). The actor's behavior did influence observers' attributions to choice. For three of the five conditions, the choice to leave was contrary to the researcher's prompt to help (unilateral help and congruent options conditions) or to the expectation to help the confederate (ambiguous options conditions). For these three conditions, an actor who left was doing other than prompted. The act of doing other than prompted may have foregrounded choice for observers because doing other than prompted suggests a second, alternative option from doing as prompted. For example, leaving when prompted to stay suggests that both staying and leaving are options. I expect that actors who do other than prompted, which was to leave in three of the five conditions, lead observers to make higher attributions to choice because doing other than prompted foregrounded the presence of options. To assess this interaction between condition and actors' behavior on observers' attributions to choice, the interaction effect was examined.

Interaction effect of condition by stay/leave. The same three choice questions for which observers who saw an actor leave made higher attributions than observers who saw an actor stay had significant interaction effects: "The watcher made the decision that she did because she realized she had a choice" ( $F[4, 309] = 29.13, p < 0.001; \eta = 0.14$ ), "The watcher made the decision that she did because she weighed the pros and cons of each decision and came to a

conclusion" (F[4, 309] = 12.93, p < 0.001;  $\eta = 0.14$ ), and "The watcher made the decision that she did because I recognized, in the situation, that she can make choices" (F[4, 309] = 24.85, p < 0.001;  $\eta = 0.13$ ). As can be seen in Figures 2-4, the patterns of means for these three questions were roughly the same and suggest that observers made higher attributions to choice when actors did other than prompted. For example, observers in the ambiguous, congruent, and unilateral help options conditions who saw an actor leave made higher attributions to choice for these three questions than observers in these same conditions who saw an actor stay. For these three conditions, the prompt, either implicit (as in the ambiguous options conditions) or explicit (as in the unilateral help and congruent options conditions) was to stay. Observers who saw actors leave in conditions in which the prompt was to stay—or do other than prompted—made higher attributions than observers who saw an actor stay in a condition in which the prompt was to stay (see Figures 2-4). Thus, for these three conditions, observers who saw an actor do other than prompted (in this case, leave when prompted to stay) made higher attributions to choice than observers who saw an actor do as prompted.

For the explicit opposed and unilateral leave options conditions, the prompt was to leave.

Observers who saw actors stay in these conditions in which the prompt was to leave—or do other than prompted— made higher attributions than observers who saw an actor leave in a condition in which the prompt was to leave (see Figures 2-4). Thus, for these two conditions, observers who saw an actor do other than prompted (in this case, stay when prompted to leave) made higher attributions to choice than observers who saw an actor do as prompted, just like attributions in the other three conditions. These patterns of means suggest that observers who saw an actor do other than prompted made higher attributions to choice than observers who saw an actor do as prompted.

Post-hoc analyses using Fisher's LSD support this conclusion for all three questions. For each of the three questions, the same four conditions significantly differed between observers who saw an actor stay and those who saw an actor leave. Table 9 shows the means, standard deviations and significance values by conditions for each of the questions. As seen in Table 9, observers in the congruent, ambiguous, and unilateral help options conditions who saw an actor leave—or do other than prompted—made significantly higher attributions to choice for the three choice questions than did observers who saw an actor stay—or do other than prompted—made significantly higher attributions who saw an actor stay—or do other than prompted—made significantly higher attributions to choice for the three choice questions than did observers who saw an actor leave (or do as prompted). There was no significant difference in the unilateral leave options condition between observers' attributions to choice for the three choice questions. These results indicate that observers who saw an actor do other than prompted made higher attributions to choice than observers who saw an actor do as prompted.

MANOVA test, I discuss the omnibus results for the MANOVA first and then present the specific ANOVA and post hoc analyses for each hypothesis separately. For hypothesis three, I expected that actors would be more likely to make attributions to choice in a given situation than observers. To assess this hypothesis, I used a between-groups factorial MANOVA with a 2 (actor or observer) by 5 (five conditions) design with the four choice questions as dependent variables. I assessed hypothesis three through the main effect between actors and observers. This same design was also appropriate to assess hypothesis four that there would be an interaction effect between foregrounding of choice and actors/observers such that the higher the foregrounding of choice, the more disparate the attributions to choice between actors and

observers, while the lower the foregrounding of choice, the closer the attributions to choice (see Figure 1). I assessed hypothesis four with the interaction effect for the design.

*MANOVA results.* Observers made higher attributions to choice than did actors according to the MANOVA analysis (Pillai's trace = 16.726, F[4, 456] = 16.73, p < 0.001;  $\eta = 0.13$ . However, there was no significant difference between conditions (Pillai's trace = 0.04, F[16, 1836] = 1.18, p = 0.27;  $\eta = 0.01$ . There was an interaction of actor/observer by condition (Pillai's trace = 0.085, F[16, 1836] = 2.50, p = 0.001;  $\eta = 0.021$ ).

Hypothesis 3, or main effect of actor/observer. ANOVA analyses suggest that the question, "The watcher made the decision that she did because she weighed the pros and cons of each decision and came to a conclusion," significantly differed, with observers (M = 4.60, SD = 0.10) making higher attributions to this question than actors (M = 3.72, SD = 0.15; (F[4, 459] = 25.18, p < 0.001;  $\eta = 0.052$ ). These results are contrary to my hypothesis; however, observers may make higher attributions to choice for some, but not all, of the conditions because actors may more acutely experience the presence of the confederate when there are opposing options.

Hypothesis 4, or interaction effect of actor/observer by condition. An ANOVA test indicated a significant interaction effect for the question, "The watcher made the choice that she did because the need for a choice was prominent" ( $F[4, 459] = 6.86, p < 0.001; \eta = 0.06$ ). As seen in Figure 5, actors made higher attributions to this question for the explicit opposed and ambiguous options conditions, but not for the unilateral help or unilateral leave options conditions. This finding suggests that actors may have been more influenced than observers, especially without a prompt to stay, by the presence of opposing options due to the distressed confederate when considering the prominence of the need for a choice, consistent with

hypothesis four. Actors and observers made roughly equal attributions to this question in the congruent options conditions (see Figure 5).

Post-hoc analyses using Fisher's LSD support this conclusion. Table 10 shows the means, standard deviations and significance values by conditions for this question. As seen in Table 10, in the unilateral help options condition, observers made significantly higher attributions to this choice question than did actors, and in the ambiguous and explicit opposed options conditions, actors made significantly higher attributions to this choice question than did observers. There were no significant differences in the unilateral leave and congruent options conditions between actors' and observers' attributions. These results indicate that while in general observers may have made higher attributions to choice than actors, actors appeared to make higher attributions to choice in situations where there were opposing options due to a distressed confederate and a researcher's prompt. Thus, while hypothesis three—actors would make higher attributions to choice—was not supported, hypothesis four—actors would make higher attributions to choice than observers for conditions in which there were opposing options—was supported, at least with regard to one of the choice questions.

### Dispositional Hypothesis, or Hypothesis Five

I expected there to be a difference between actors and observers for attributions to dispositional traits. However, because the literature conflicts concerning the outcome of attributions to dispositional traits, I did not hypothesizing a direction for the difference between actors and observers on attributions to dispositional traits. To assess this hypothesis, I used a between-groups factorial MANOVA with a 2 (actor or observer) by 5 (five conditions) design with the five disposition questions as dependent variables.

**MANOVA results.** The MANOVA results suggested there was a difference between actors and observers attributions to disposition (Pillai's trace = 0.113, F[5, 455] = 11.64, p < 0.001;  $\eta$  = 0.113). However, there was no significant difference between conditions (Pillai's trace = 0.06, F[20, 1832] = 1.35, p = 0.14;  $\eta$  = 0.02. The MANOVA results suggested there was an interaction effect of actor/observer by condition (Pillai's trace = 0.118, F[20, 1832] = 2.77, p < 0.001;  $\eta$  = 0.029).

**Main effect of actor/observer.** The ANOVA tests indicated that for two disposition questions—"I made the decision that I did because I am a helpful person" (F[1, 459] = 39.97, p < 0.001;  $\eta = 0.08$ ) and "I made the decision that I did because I am a sympathetic person" (F[1, 459] = 10.13, p = 0.002;  $\eta = 0.02$ )—actors made higher attributions than observers. This finding runs counter to that predicted by the traditional actor-observer effect, which predicts that observers make higher attributions to disposition than actors do. Again, the interaction effect will help determine if there were specific conditions in which actors made higher attributions to disposition than observers.

Interaction effect of actor/observer by condition. The ANOVA tests indicated that there was an interaction effect for four of the five disposition question: "I made the decision that I did because of my personal ethical beliefs" (F[4, 459] = 4.83, p = 0.001;  $\eta = 0.04$ ), "I made the decision that I did because I am a helpful person" (F[4, 459] = 3.68, p = 0.006;  $\eta = 0.03$ ), "I made the decision that I did because I am a non-conformist" (F[4, 459] = 3.40, p = 0.009;  $\eta = 0.03$ ), and "I made the decision that I did because I am sympathetic person" (F[4, 459] = 7.71, p < 0.001;  $\eta = 0.06$ ).

As seen in Figures 6-8, the patterns of means for the three questions about ethical beliefs, being a helpful person, and being a sympathetic person had roughly similar patterns with actors

making higher attributions than observers for the conditions in which there were a distressed confederate and a researcher's prompt. Actors and observers attributions to these questions converged for the unilateral options conditions, and in some cases, observers made higher attributions than actors for the unilateral options conditions (see Figure 6-8).

Post hoc analyses for these three questions using Fisher's LSD suggested that actors made higher attributions than observers to ethical beliefs and being a helpful and sympathetic person in conditions in which there were a distressed confederate and a researcher's prompt (see Table 11). As seen in Table 11, for all three questions, actors made significantly higher attributions than observers for the congruent and ambiguous options conditions. Furthermore, actors made significantly higher attributions to being a helpful and sympathetic person than observers for the explicit opposed options conditions (see Table 11). These findings suggest that the presence of opposing options due to a distressed confederate cued actors to make higher dispositional attributions to ethical beliefs and being a helpful and sympathetic person than observers. In contrast, when there are no opposing options, in general actors and observers seemed to make similar attributions to these three questions. However, observers did make significantly higher attributions than actors to ethical beliefs and being a sympathetic person for the unilateral leave options condition, and actors made significantly higher attributions than observers to being a helpful person for the unilateral help options condition (see Table 11).

As seen in Figure 9, the pattern of means for the question about being a non-conformist suggested that actors made higher attributions than observers for the explicit opposed condition, but that for all other conditions, actors and observers did not differ on attributions. Post hoc analyses for this question using Fisher's LSD supported this conclusion since actors did make significantly higher attributions than observers to being a non-conformist for the explicit opposed

options condition, but actors did not differ significantly from observers for any of the other conditions. Since about half of the actors in the explicit opposed options condition did other than prompted (compared with almost zero percent in the other conditions; see Table 3), it is likely that actors who did otherwise in the explicit opposed condition, and were able to label themselves as non-conformists based on their actions, accounted for the difference between actors and observers. The other conditions, in contrast, only had one or two actors who did other than prompted and could label themselves as non-conformists on that basis. The observers, on the other hand, seemed to recognize actors' choices more than actors did since observers made higher attributions to choice (see results for hypothesis three). Thus, observers may not have seen actors as being non-conformist because observers understood the situation as one in which there were multiple plausible options.

### Situational Hypothesis, or Hypothesis Six

I expected actors to be more likely to make attributions to the situations than observers.

To assess this hypothesis, I used a between-groups factorial MANOVA with a 2 (actor or observer) by 5 (five conditions) design with the five situational questions as dependent variables.

**MANOVA results.** For two of the situational questions, actors made higher attributions than observers, and for two other situational questions, observers made higher attributions than actors (Pillai's trace = 0.170, F[5, 455] = 18.59, p < 0.001;  $\eta = 0.170$ ). For the MANOVA analysis, there was also a significant main effect by condition (Pillai's trace = 0.126, F[20, 1832] = 2.98, p < 0.001;  $\eta = 0.031$ ) and a significant interaction effect (Pillai's trace = 0.237, F[20, 1832] = 5.78, p < 0.001;  $\eta = 0.059$ ).

**Main effect of actor/observer.** Counter to my hypothesis, for the questions, "I made the decision that I did because of the other participant's behavior" (F[1, 459] = 5.71, p = 0.006;  $\eta =$ 

0.02; see Figure 10) and "I made the decision that I did because it alleviated the tension" (F[1, 459] = 64.93, p < 0.001;  $\eta = 0.12$ ; see Figure 11), observers made significantly higher attributions than actors. For the question about the confederate's behavior, there was a significant interaction effect which may provide additional information about which conditions observers made higher attributions than actors. For the question about alleviating tension, observers made higher attributions than actors in every condition, suggesting that observers made inferences about the tension in the situation that actors did not. It may be that observers used the researcher's prompt and/or the confederate's distress (depending on the condition) as a cue to make inferences about tension.

Consistent with my hypothesis, for the questions, "I made the decision that I did because I felt it was the only option given the situation" (F[1, 459] = 7.95, p = 0.005;  $\eta = 0.02$ ; see Figure 12) and "I made the decision that I did because I felt the research depended on me" (F[1, 459] = 5.64, p = 0.018;  $\eta = 0.01$ ; see Figure 13), actors made significantly higher attributions than observers. For the question about the only option given the situation, actors made higher attributions than observers in the explicit opposed, ambiguous, congruent, and unilateral leave options conditions.

For the question about the research depending on the actor, actors made higher attributions than observers in the explicit opposed, ambiguous, congruent, and unilateral help options conditions. This finding suggests that one of the constraints felt by actors was the constraint of the situation as research. As will be seen from the interaction effect, which option constrains actors' behavior depended on the condition since there are interaction effects for the two questions about the two constraints on behavior: the researcher's prompt and the distressed confederate's behavior.

**Main effect of condition.** For the question, "I made the decision that I did because of the other participant's behavior" (F[4, 459] = 4.95, p = 0.001;  $\eta = 0.041$ ), actors and observers made significantly higher attributions in the congruent options conditions than in all other conditions ( $p \le 0.01$ ; see Table 14). This finding indicates that actors and observers viewed the actor as behaving due to the confederate's behavior primarily in the congruent options conditions even though there was a researcher's prompt to help in that condition as well. There was also a significant interaction effect which may provide additional information about which conditions observers made higher attributions than actors.

For the question, "I made the decision that I did because I felt it was the only option in the situation" (F[4, 459] = 4.49, p = 0.001;  $\eta = 0.038$ ), actors and observers made significantly higher attributions in the unilateral leave, explicit opposed, and congruent options conditions than in ambiguous options condition (p = 0.001, p = 0.008, and p = 0.027, respectively; see Table 14). For these three conditions, unilateral leave, explicit opposed, and congruent, there was a direct researcher prompt either to leave or stay. In contrast, the ambiguous options condition did not have a researcher prompt. Thus, attributions to the necessity of the actor's behavior most likely resulted from the presence of a researcher's prompt. Since this question did not have a significant interaction effect, I present post hoc analyses. Actors and observers in the unilateral leave and explicit opposed options conditions also made significantly higher attributions than in the unilateral help options condition (p = 0.002 and p = 0.017, respectively; see Table 14). The unilateral leave and explicit opposed options conditions likely differed from the unilateral help option condition because helping was most likely perceived by actors and observers as the preferred choice in the situation. In contrast, for the unilateral leave and explicit opposed options conditions, the prompt to leave went against the actor's role in the research as well as the

tendency to help someone in distress. Thus, the prompt to leave went against the actors' and observers' expectations for the situation while the prompt to stay was consistent with these expectations.

For the question, "I made the decision that I did because I was prompted by the researcher" (F[4, 459] = 4.85, p = 0.001;  $\eta = 0.041$ ), actors and observers made significantly higher attributions in the unilateral leave options condition than in all other conditions ( $p \le 0.023$ ; see Table 14). This finding indicates that actors and observers viewed the actor's behavior as due to a researcher's prompt more when there was no distressed confederate and the prompt was to leave. Without a distressed confederate, actors and observers were more likely to claim that the actor's behavior was due to the researcher's prompt. There was also a significant interaction effect which may provide additional information about which conditions observers made higher attributions than actors.

Interaction effect of actor/observer by condition. The interaction effect was significant for two of the five situational questions: "I made the decision that I did because of the other participant's behavior" (F[4, 459] = 24.972, p < 0.001;  $\eta$  = 0.18; see Figure 10) and "I made the decision that I did because I was prompted by the researcher" (F[4, 459] = 3.77, p < 0.005;  $\eta$  = 0.03; see Figure 14).

For the question about the confederate's behavior, actors made higher attributions than observers in the explicit opposed and ambiguous options conditions while observers made higher attributions than actors in the unilateral help and unilateral leave options conditions (see Figure 10). Actors' and observers' attribution in the congruent options condition were roughly equivalent (see Figure 10). This pattern of means suggests that observers foregrounded the confederate's behavior more than actors when there was only one viable choice, while actors

foregrounded the confederate's behaviors when there were opposing options due to the presence of the distressed confederate. For the unilateral options conditions, without the presence of a distressed confederate, actors attributions to the confederate's behavior was lower mostly likely because the confederate's behavior was different than in the other conditions. Instead, actors may have been making attributions to the researcher's prompt. In contrast, observers made higher attributions than actors for the congruent, unilateral help, and unilateral leave options conditions. When the researcher's prompt did not discourage the actor from helping the distressed confederate (such as in the congruent, unilateral help, and unilateral leave options conditions), observers perceived the actor's behavior as due to the behavior of the confederate, regardless if the confederate was distressed or not. However, for observer, when the prompt did discourage, either explicitly or implicitly, actors from helping the confederate (as in the explicit opposed and ambiguous options conditions), the prompt seemed to override the necessity to help the confederate.

Post hoc analyses for this question using Fisher's LSD somewhat supported these conclusions. As seen in Figure 10, actors in the ambiguous options condition made significantly higher attribution than observers in the same condition (p < 0.001), while observers in the unilateral help and unilateral leave options conditions made significantly higher attribution than actors in the same condition (both p < 0.001; see Table 12). These findings support the suggestion that observers foregrounded the confederate's behavior more than actors when there was only one viable choice, while actors foregrounded the confederate's behaviors when there were opposing options due to the presence of the distressed confederate.

For the question about being prompted by the researcher, observers made higher attributions than actors in the explicit opposed and ambiguous options conditions while actors

made higher attributions than observers in the unilateral help and unilateral leave options conditions (see Figure 14). This pattern of means suggests that observers foregrounded the researcher's prompt more than actors when there were opposing options due to the presence of a distressed confederate, while actors foregrounded the researcher's prompt when there was only one viable option.

Post hoc analyses for this question using Fisher's LSD somewhat supported this suggestion. As seen in Figure 14, actors made significantly higher attributions to this question than observers for the unilateral help (p = 0.041) and unilateral leave options conditions (p = 0.008; see Table 12). Without the presence of opposing options due to a distressed confederate, actors made higher attributions to the researcher's prompt as suggested above. Thus, while for observers, the researcher's prompt was somewhat influential across all five conditions, for actors, the researcher's prompt was only influential for the unilateral conditions in which there were no opposing options. Instead, actors in conditions in which there were opposing options made attributions to the confederate's behavior.

#### **Discussion**

The primary purpose of this research was to empirically assess an alternative approach to the actor-observer effect that I called the contextual perspective. The traditional actor-observer effect claims that people primarily make attributions depending on their role in a particular situation, whether as an actor or an observer (Jones & Nisbett, 1972). From this perspective, the actors make attributions to the situation, and observers make attributions to the actor's disposition because of each person's role in the situation. In contrast, the contextual perspective claims that attributions by actors and observers are influenced by the holistic context in which actors and observers are present (Reeder, et al. 2008). For example, the influence of context

includes the role of actor or observer, as in the traditional perspective, but also includes other aspects of the situation such as societal expectations and the behavior of the actor and other people. These various aspects of the situation are mutually interdependent in that the meaning of any particular aspect depends on its relationship with the other aspects of the context. For example, the meaning of an actor's behavior is interdependent on the presence of other people such as a distressed person or a person in authority. This contextual perspective has roots in the tradition of Gestalt psychology, among other traditions, which suggest that a certain patter of relations among parts of a whole can lead to the foregrounding of some parts over other parts, as in figure/ground relationships (see, e.g., Heider, 1958).

For this research, I manipulated the presence of a distressed confederate and a researcher's prompt to influence the foreground that constrains actors' and observers' attributions to choice, disposition, and situation. I assumed that, if the contextual constraints of the distressed confederate and the researcher's prompt did influence actors' and observers' attributions to choice, disposition, and situation, then it could be reasonably concluded that the contextual perspective provides a more comprehensive and nuanced account of actors' and observers' attributions than the traditional actor-observer effect. In what follows, I discuss the extent to which the results of this study supported my general hypothesis that actors' and observers' attributions were influenced by the contextual constraints of a distressed confederate and a researcher's prompt in a manner consistent with the contextual perspective.

# The Contextual Perspective and Actors' and Observers' Attributions

Actors' and observers' attributions, especially when compared with each other, did suggest that the contextual aspects of a distressed confederate and a researcher's prompt influenced attributions to choice, disposition, and situation. While the results of the first

hypothesis were non-significant, the second and fourth hypothesis tests illustrated this point. Hypothesis one anticipated a gradual decrease in actors' attributions to choice as the opposition of the constraints of the researcher's prompt and the confederate's distress became less explicit and ultimately diminished altogether (see Figure 3). Instead, I found that attributions to choice were influenced by the presence of the distressed confederate and the researcher's prompt in an almost categorical manner. That is, when there was a distressed confederate present, actors' attributions to choice were high and when the confederate was not distressed, actor's attributions to choice were low (see Figure 5). Contrary to my initial hypothesis, but still supportive of the contextual perspective, this finding suggests, as will be discussed throughout this discussion section, that the face to face encounter with a suffering confederate creates a Gestalt-like shift in the context that foregrounds choice for actors.

Hypothesis two investigated the extent to which observers' attributions to choice would be influenced by the presence of the distressed confederate and a researcher's prompt, and again, the main distinction was between conditions in which there was a distressed confederate and conditions in which there was no distressed confederate instead of a gradual change from condition to condition. In fact, the distinction between condition in which there was a distressed confederate and conditions in which the confederate was not distressed is an important distinction of each of the hypotheses, as will be discussed.

Hypothesis four investigated an interaction between actors' and observers' attributions and the presence of a distressed confederate such that actors would make progressively more attributions to choice compared to observers as foregrounding of choice increases (see Figure 1). While the results of the MANOVA examining actors' attributions to choice showed no significant differences between actors who experienced a distressed confederate and those who

did not (hypothesis one), for observers, the results of the MANOVA showed that the manipulation of these two contextual constraints did significantly influence their attributions to choice as predicted by hypothesis two. Observers made higher attributions to choice when there were opposing options in the form of a researcher's prompt and a distressed confederate than when there was a non-distressed confederate as predicted.

Even though actors' attributions to choice did not seem to be influenced by the presence of a distressed confederate and a researcher's prompt, when comparing actors' and observers' attributions to choice, the relationship among the contextual constraints influenced actors and observers differently. The results of the MANOVA test for hypothesis four, the interaction between actors' and observers' attributions and the presence of the distressed confederate, showed that actors made higher attributions to choice than observers when the distressed confederate was present. The presence of the distressed confederate and the researcher's prompt most likely provided two different options for actors, and these options foregrounded the need for a choice, much like Fiske (1989) has suggested that two options are required for lay attributions to choice. Furthermore, when there was only one viable option created by the researcher's prompt without a distressed confederate, observers made higher attributions to choice than actors. Particularly in the results for hypothesis four, actors and observers made different attributions because actors were faced with a different relationship than observers. For actors, the presence of the distressed confederate was a particularly important constraint on their attributions to choice. The constraint of the distressed confederate seemed to be important for actors because actors, more than observers, were face-to-face with the confederate and were required to respond to the choice presented by the presence of the distressed confederate and the researcher's command. The influence of the face-to-face encounter with another person is

consistent with Levinas' (1969) philosophical work which suggests that the face-to-face encounter takes precedence over other aspects of the context.

A face-to-face encounter with another person. One feature of the context that might help explain the differences in what was foregrounded by actors and observers in their attributions to choice was the actors' face-to-face encounter with the researcher and the confederate. Advocates of the contextual perspective, such as Reeder et al. (2008) and Heider (1958), have argued that certain features of a context, such as a face-to-face encounter with a distressed confederate, could constrain actors' attributions. Since actors were face-to-face with a distressed or non-distressed confederate and a researcher stating a prompt, the options created by the presence of both of these contextual constraints were likely to be experienced differently by actors than by observers who watched from a third-person perspective. Since actors were directly faced with a distressed confederate and the researcher's prompt, actors most likely experienced the consequences of their choice more strongly than observers. In other words, actors most likely experienced the choice they needed to make as more important, given their face-to-face encounter with the distressed confederate, than observers, who were not face-to-face with the distressed confederate.

In this sense, actors seemed to take responsibility to choose when presented with opposing options created by a distressed confederate and researcher's prompt. Levinas (1969) suggests that when face-to-face with another person, an individual must account for his or her responsibility for the other person, which seems to be consistent with the actors' attributions, especially in those conditions in which a distressed confederate was present. In contrast, observers most likely did not understand the responsibility to choose experienced by the actor

because observers were not faced with the distressed confederate and the researcher's command, the constraints that constituted the need for a choice.

However, when there was only the researcher's prompt, actors made lower attributions to choice than observers. Instead, actors made higher attributions than observers to the researcher's prompt in this context. Here again, the face-to-face encounter with a researcher who was directly asking the actor to stay or leave seemed to have a stronger impact on actors than those observing from a 3<sup>rd</sup> person perspective—a finding consistent with Levinas' (1969) work. For actors, the researcher's prompt felt less like a choice than it did for observers because they were face-to-face with the researcher. Observers, again, were only watching someone being asked to stay or leave and so were not face-to-face with the researcher either. Without the presence of a distressed confederate to present options to the actor, actors foregrounded the researcher's prompt and did so to a greater degree than observers, perhaps because they experienced the prompt directly.

The MANOVA results for hypothesis six, which predicted that actors would make higher attributions to the situation than observers, showed that actors might have felt like there was only one possible option given the context when they were face-to-face with a researcher only, particularly when the researcher asked actors to leave. Thus, not only did actors make lower attributions to choice than observers when face-to-face with the researcher without a distressed confederate, they also felt like they had only one viable option presented to them in this context. Milgram's (1963) research supports the importance of the face-to-face encounter with the researcher. He suggests that actors are already inclined toward the researcher when they enter the laboratory and are likely to see the researcher as an authority figure. Thus, the researcher is in a position to influence an actor's behavior through prompts. His research also shows that

actors' face-to-face encounter with the researcher strengthens the tendency to obey the researcher's prompts. Milgram (1974) "showed that the physical *presence* of an authority was an important force contributing to the subject's obedience or defiance. Obedience to destructive commands was in some degree dependent on the proximal relations between authority and subject..." (p. 62). In contrast, when there was a distressed confederate present, actors did not feel there was only one option, but as discussed with hypothesis 4, made higher attributions to choice than observers which suggested that actors foregrounded the distressed confederate instead of the researcher.

In the same way that actors felt responsible to choose when there was a distressed confederate because they were face-to-face with the other person, they also seemed to feel responsible to follow the researcher's prompt in the absence of a distressed confederate more than observers because they were faced with another person and observers were not. In other words, when there was a researcher and a distressed confederate, actors were constrained to make a choice between following the researcher's prompt and the distressed confederate more than observers, but when actors were face-to-face with a researcher only, they were constrained to follow the researcher's prompt more than observers. Yet, when both the distressed confederate and the researcher's prompt were present, the distressed confederate was foregrounded for actors, suggesting that the presence of a distressed confederate constrained the meaning of the researcher's prompt for actors. This finding resonates with the phenomenological claim that meanings, of which attribution would be an example, are constrained by people's behavior such that some meanings, such as following the researcher's prompt when there is no distressed confederate, are revealed while other meanings, such as the

other potential option of disobeying the researcher's prompt when there is no distressed confederate, are hidden (see, e.g., Heidegger, 1962; Fuller, 1990).

That actors foregrounded the distressed confederate even when there was a researcher's prompt is also consistent with Milgram's (1974) research which found that obedience to the researcher's prompt dropped significantly when the "learner," a distressed confederate, was face-to-face with the participant. Thus, when face-to-face with a researcher only, actors were more likely to respond to the researcher's prompts than observers who were not face-to-face with anyone. On the other hand, when face-to-face with a distressed confederate *and* a researcher, actors felt responsible to make a choice between the two constraints while responding in some way to the distressed confederate. For actors, the presence of a distressed confederate foregrounded choice and the presence of a researcher's prompt without a distressed confederate foregrounded the prompt as the only viable option in the context, consistent with the Gestalt and phenomenological roots of Heider's (1958) work.

This comparison varies from the frame of reference typically used in actorobserver studies. Typically actors and observers make attributions about the same behavior of
the actor. In contrast, in this study, actors saw only their own behavior, and when there was no
distressed confederate, almost all actors followed the researcher's prompt (see Table 3). In other
words, most actors did as prompted. Thus, observers who saw actors *either* do as prompted or
do other than prompted were compared with actors who almost all only did as prompted. This
resulted in actors and some of the observers making attributions about different behaviors instead
of the same behavior. This was a clear variation from the typical set up for the actor/observer
effect in which actors and observers are making attributions about the same behavior. Because
actors observed only one behavior (the behavior they all chose) and observers observed two

different behaviors in equal number (the behavior actors chose and its opposite), the interpretation of the results of the comparisons between actors and observers require greater elaboration and caution than the within-groups comparisons. I provide this elaboration and caution in those sections of the discussion where the need is present. Since I did not anticipate such lopsided behaviors from the actors, but expected somewhat more even distributions across conditions, I did not expect that actors and observers would end up judging different behaviors in some of the conditions. Despite this unexpected outcome, the data collected did allow for a comparison of attributions between the subset of observers who saw the same behavior as the actual behavior actors chose. Thus, to assess whether there were any significant differences between attributions made by observers and actors examining the same behavior and the results already presented in which some observers examined the same behavior as the actors, I conducted MANOVA analyses for attributions to choice using only observers who saw the same behavior as most actors chose. These analyses suggested that actors made higher attributions to choice when there was a distressed confederate and observers made higher attributions to choice when there was not a distressed confederate. This finding is the same as the finding when considering all observers compared with all actors.

The face-to-face encounter as ethical. The importance of the contextual constraint of the face-to-face experience of the distressed confederate was also supported by actors' attributions to their dispositional traits of ethical beliefs and being a sympathetic and helpful person. Furthermore, actors attributed their behavior to the distressed confederate's behavior more than observers. With regard to dispositional attribution, in hypothesis five I stated that actors and observers would differ on attributions to disposition such as being a helpful and sympathetic person and following ethical beliefs. The findings of the MANOVA for hypothesis

five showed that actors made higher attributions to these dispositional traits than observers in conditions in which there was both a distressed confederate and a researcher's prompt. With regard to attributions to the distressed confederate's behavior, in hypothesis six I stated that actors would make higher attributions to the situation, such as the distressed confederate's behavior, than observers. Consistent with hypothesis six, actors attributed their behavior to the presence of the distressed confederate in this same context. In other words, actors recognized the constraint of the distressed confederate on their behavior more than observers, and this constraint seemed to foreground for the actor his or her ethical beliefs and responsibility to be a helpful and sympathetic person more than for observers.

For Levinas (1969), the face-to-face encounter reveals *moral* responsibility, or a responsibility to account for experiences of the other person. In particular, Levinas (1969) claims that the face-to-face encounter reveals a suffering person. Thus, actors who were face-to-face with a distressed, or suffering, person may have experienced their moral responsibility toward this other person. The observers, on the other hand, who were not face-to-face with the distressed confederate were less likely to feel that actors had a choice when there was a distressed confederate and a researcher giving the actor a prompt, and they were less likely to attribute the actor's behavior to the actor's ethical beliefs or the actor's helpful and sympathetic dispositions.

Actors seemed to feel a responsibility to make a choice that they believed was consistent with their ethical beliefs and with being a helpful and sympathetic person because of the presence of the distressed confederate, consistent with Levinas' (1969) work. Observers seemed to be unaware of this feeling because they were not face-to-face with the confederate's distress, leading to a different attribution than the actors. The presence of a distressed confederate

seemed to encourage actors to be ethically responsible for the distressed confederate, at least from the actors' perspective. On this point, Daniel Batson's (1981) research on empathy-based altruism may also be instructive. Batson (1981) suggests that empathic helpers not only attribute their helpful behavior to an ethical responsibility to help, but are also more likely to behave ethically when there is a distressed person in need. Although empathy was not directly assessed in this research, sympathy may work in a similar way to generate a sense of ethical responsibility for the suffering confederate and to motivate helpful behavior. At the very least, actors who were face-to-face with a confederate in need seemed to place more attributional emphasis on their disposition to sympathize, behave ethically, and help those in need than did observers who watched from a distance.

For the most part, the actions of the actors also suggested that actors responded ethically to the presence of the distressed confederate. That is, when presented with a distressed confederate, the majority of actors stayed to help the distressed confederate (see Table 3). Even when the researcher's prompt was explicitly to leave, almost half of the actors stayed and helped (see Table 3). In this explicitly opposed options condition, the behavior of the actors—roughly half stayed and half left—suggested that actors made a decision between ethically responding to the distressed confederate or following a researcher's prompt. In other words, consistent with Fiske's (1989) work in which options present a choice, actors needed to make a moral choice between two face-to-face encounters, one with the distressed confederate and one with the researcher. This may suggest that even if the actors in this condition did not make a greater attribution to choice than actors in other conditions, as was predicted by hypothesis one, their behavior showed that the options to stay or leave were more genuinely viable choices for actors in that condition, with about half staying and half leaving. Within every other condition, almost

all the actors acted in one common way, which suggests that the options were not equally viable for the actors.

Further research should examine how behavior can reveal options that were possible in a given context even though actors may not attribute their behavior to the need for a choice. Heidegger's (1962) philosophical work provides a potential theoretical background for research about how a person's behavior reveals meaning within a context. For Heidegger, actions constrain and are constrained by the context in mutually interdependent ways (see also, Fuller, 1990). Heidegger (1962) discusses how a carpenter's behavior when using a hammer reveals the meaning of a hammer. For Heidegger, the use of the hammer reveals certain possibilities, such as attaching board together with nails, while being constrained by the qualities of the hammer that do not allow the carpenter to glue the board together. Similarly, actors' behavior in the explicit opposed condition reveals the possibility of two options in that context even though actors did not make attributions to choice. Actors' choice in relation to the context seems to have constrained actors' attributions such that whether actors chose to leave or stay, each actor saw this option as the only viable option. Thus, the actors' choices reveal a certain possibility, the possibility to choose, while the act of choosing constrains actors' attributions to choice.

In contrast, without the presence of a distressed confederate, actors' and observers' attributions to ethical behavior and being a helpful and sympathetic person converged. When there was no distressed confederate but only the researcher's prompt, actors no longer differed from observers in their dispositional attributions to their responsibility for the (non-distressed) confederate. Without the presence of a distressed confederate, actors' and observers' similar attributions to ethical beliefs and being a helpful and sympathetic person might have reflected a baseline concerning a person's responsibility to behave ethically and be a helpful and

sympathetic person in general. When there was a distressed confederate, actors foregrounded the presence of the distressed confederate, and so made higher attributions than observers to behaving ethically and being a helpful and sympathetic person, while observers made higher attributions than actors to the researcher's prompt. That is, the presence of a distressed confederate constrained actors and observers to diverge from the baseline attributions to ethical beliefs and being a sympathetic and helpful person, consistent with Levinas' (1969) emphasis on the face-to-face encounter with a suffering person. Furthermore, the specific way actors' and observers' attributions changed depended on the context for actors and observers with actors being constrained by face-to-face encounter with a distressed confederate and observers being constrained by the presence of an authority figure, consistent with the contextual perspective as understood by Reeder et al. (2008) and Heider (1958).

The influence of the researcher's prompt. The researcher's prompt also influenced actors and observers attributions differently depending on the context. In hypothesis six, I claimed that actors would make higher attributions than observers to the situation, such as the confederate's behavior. The results of the MANOVA indicated that observers made higher attributions than actors to the confederate's behavior when there was no distressed confederate present, contrary to hypothesis six. Thus, in contrast to actors who made higher attributions to the confederate's behavior when there was a distressed confederate present consistent with hypothesis six, observers made higher attributions to the confederate's behavior when there was a non-distressed confederate and a researcher giving a prompt. Furthermore, observers made higher attributions than actors to choice in this same context. Thus, in the absence of a distressed confederate, observers understood actors' behavior as a choice for actors which was influenced by the behavior of the confederate.

This result was most likely due to the fact that observers and actors made attributions about different behaviors, as discussed earlier. For example, when there was no distressed confederate and the researcher's prompt was to leave, roughly equal numbers of observer saw an actor stay as saw an actor leave. The same is true when there was no distressed confederate and the researcher's prompt was to stay. Thus, in some cases, to observers it appeared as if actors were doing other than prompted by the researcher without any obvious reason for their behavior. Observers who see this context most likely attempted to provide a rationale for actors doing other than prompted, such as the confederate's behavior. Further research would need to assess the extent to which actors' attributions would be more similar to observers' attributions when comparing attributions of the same behavior. As suggested earlier, for attributions to choice, there does not appear to be a difference, but further research could make explicit hypotheses about how actors and observers attributions would differ by context when comparing within the same behavior of the actor. It may be that actors and observers attributions may be more alike when their attributions are compared for actors who did as prompted separately from actors who did other than prompted.

Since observers made higher attributions to choice when there was only one option (the researcher's prompt) but not when there were opposing options, this suggested that when there was a distressed confederate and a researcher's prompt (opposing options), observers saw the actor's behavior as constrained by some other aspect of the context. In fact, observers made higher attributions to the researcher's prompt than actors when there was a distressed confederate and researcher's prompt. So while actors foregrounded the distressed confederate, in the same context, observers foregrounded the researcher's prompt. Again, since actors were directly faced with the distressed confederate and observers were not, observers were less likely to foreground

the distressed confederate. Furthermore, for this same reason, actors foregrounded the distressed confederate while the researcher's prompt seemed to become part of the background of the context that constrained actors to make a choice to help the distressed confederate. Since for actors the researcher's prompt was part of the context that foregrounded the distressed confederate, but observers were not directly faced with the distressed confederate, observers' attributions to the researcher's prompt were higher than actors' attributions. Since observers were not faced directly with the distressed confederate, the researcher's prompt most likely represented the influence of an authority figure for observers.

Milgram's (1963) research suggests the importance of authority, and observers seemed to foreground this importance to obey authority. Milgram's (1974) research also suggests that the more removed from a distressed confederate someone is, the more likely that person is to foreground the researcher's prompt. Since observers were removed from the presence of the distressed confederate, they foregrounded the researcher's prompt. However, observers in this study were not directly faced with the researcher either as were the participants in Milgram's (1963) study. Further research would need to determine how the constraint of proximity to the researcher's prompt influences observers' attributions to the researcher's prompt. It may be that when observers are directly faced with a researcher's prompt and a distressed confederate, as were actors in this study, their attributions are more similar to actors' attributions in this study. For example, if observers were present in the room with the actor, researcher and distressed confederate, then observers' attributions to choice, disposition, and situation may be more similar to actors' attributions. In their study, Reeder et al. (2008) found that when there was no reference to the researcher's prompt in the vignettes about Milgram's experiment, observers made less attributions to the researcher's prompt than when the prompt was mentioned in the

vignettes. Instead, observers made higher attributions to the "teacher's" dispositional trait of being a hurtful person who wanted to harm the "learner." This suggests that the proximity of the researcher's prompt does influence observers' attributions. However, Reeder et al.'s (2008) study did not address how observers would make attributions if they were in the same room at the same time as the actor, and further research would need to determine this.

# The Importance of the Presence of a Distressed Confederate

Milgram (1974) and Batson (1981) provide explanations for why the distressed confederate and the researcher's prompt strongly constrained attributions. Authority figures are powerful constraints because of the importance Western society places on being obedient to authority figures (Milgram, 1974). A distressed person is a powerful constraint toward prosocial behavior because it often evokes an empathic response (Batson, 1981). Yet for this study, actors' and observers' attributions to choice, disposition, and situation changed when there was a distressed confederate present compared to when the confederate was not in distress. Actors' and observers' attributions to choice, disposition, and situation were constrained by the researcher's prompt, but the distressed confederate seemed to be foregrounded, especially for actors, even when there was a researcher's prompt. Since the presence of the distressed confederate was often foregrounded, it seemed to be the key constraint on actors' and observers' attributions to choice, disposition, and situation.

In this research, I expected attributions to choice, disposition, and situation to change gradually between the different conditions. Instead, I found that the presence of the distressed confederate constrained attributions to choice, disposition, and situation in much the same way regardless of the condition. Actors' and observers' attributions to choice, disposition, and situation consistently differed between context in which there was a distressed confederate

present and context in which there was a non-distressed confederate present. This difference may have been due to the nature of contextual constraints: A particular constraint is foregrounded and will always be foregrounded until that aspect is no longer present. However, this difference may also have been due to the particular constraint used in this research. Levinas' (1969) account of how a face-to-face encounter typically reveals a suffering other may explain why the presence of the distressed confederate had such influence on attributions. For Levinas, the experience of a suffering other places the actor in a position in which the actor must respond. Whether the actor decides to help the suffering other or leave without helping, the actor is responding in some way to his or her responsibility for the suffering other. In this sense, no other concerns or aspects of the context are important. When faced with the suffering other, the suffering other is the foreground of the context and calls the actor to respond.

The presence of a distressed confederate may have had such influence on the context that it was always foregrounded regardless of the other aspects of the context. If the difference between attribution when there was a distressed confederate present and when there was not a distressed confederate present was due to the nature of the distressed confederate as a constraint, then other contexts without a distressed confederate may not have the same pattern of differences. Instead, other contexts may have attributions that gradually change as the context changes. In other words, other contextual cues may be more subtle but still influence actors' and/or observers' attributions. For example, without a distressed confederate, the nature of the researcher's prompt may constrain actors' and observers' attribution more gradually. Milgram's (1974) research suggests that the proximity of the researcher can also influence behavior, and proximity may also influence attributions. For example, if the researcher were in another room, actors and observers may make higher attributions to choice because the influence of the

researcher seems more removed to the actor and observer than if the researcher were in the same room. The proximity of the researcher, and the way the prompt is delivered, may act as more subtle constraints on actors' and observers' attributions to choice, disposition, and situation. Further research would be required to determine how and why certain contextual cues are foregrounded, much like Gestalt psychologists researched how and why certain visual stimuli impacted visual perception.

# The Contextual Perspective and the Actor's Behavior

Apart from the strong constraint of the distressed confederate, and the constraint of the researcher's prompt, the actor's behavior most likely was an important constraint of the context as well. For example, observers made higher attributions to choice when the actor did other than prompted. Regardless of the presence of a distressed confederate, when the researcher prompted the actor to leave, but the actor stayed, observers made higher attributions to choice than when the actor left. Furthermore, regardless of the presence of a distressed confederate, when the researcher prompted the actor to stay, but the actor left, observers made higher attributions to choice than when the actor stayed. In this sense, the actor's behavior had a different meaning for observers depending on the researcher's prompt. Again, the importance of the relationship between aspects of the context is consistent with much of the work in phenomenology, particularly Heidegger's (1962) work (see also, Faulconer & Williams, 1990; Fuller, 1990). From the perspective of phenomenology, the dots on the page become a Dalmatian because of the relationship between the dots as well as the relationship with the perceiver. None of the separate aspects of the context is independent from the other aspects. For Heidegger (1962), it is the relationship of the carpenter with the hammer, with the nail, and with the carpenter's task of attaching two boards together that is necessary to the meaning of the context.

When the actor's behavior was other than prompted, observers attributed more choice to the actor than when the actor's behavior was consistent with the researcher's prompt. The meaning of an actor's behavior was changed depending on the context of that action. For observers, it mattered less what the specific behavior was; instead, the context created by the relationship of the actor's behavior with the researcher's prompt mattered for observers. The context revealed by the actor's and researcher's behavior constrained observers' attributions to choice consistent with Heidegger's (1962) understanding of how behavior reveals meaning, including attributions.

From the contextual perspective, the context constrains what aspect of the context becomes the foreground (see, e.g., Heidegger, 1962; Faulconer & Williams, 1990; Fuller, 1990). Furthermore, from this perspective, the foreground, and its relationship to the other aspects of the context, reveals certain meanings, such as doing other than prompted, to the observer (see e.g., Heider, 1958). So as I manipulated the presentation of the actor's behavior with different prompts from the researcher, I manipulated the context that foregrounded, or revealed, certain meanings, such as doing other than prompted, to the observer. The relationship between the actor's behavior and the researcher's prompt revealed to the observer how much choice the actor felt in the context. When the actor's behavior was other than prompted, this context revealed to the observer that the actor felt he or she had a choice between doing as prompted and not doing as prompted. When the actor's behavior was consistent with the prompt, this context revealed to the observer that the actor felt somewhat constrained by the researcher's prompt.

With the example of observers' attributions to choice and the relationship between the researcher's prompt and the actor's behavior, the holistic nature of context, as expected from the contextual perspective (see, e.g., Heider, 1958; Reeder et al., 2008) is demonstrated. In this case,

neither the researcher's prompt nor the actor's behavior were independent from each other. If the observer only heard the researcher's prompt, her or she could not know if the actor did other than prompted. If the observer only saw the actor's behavior, he or she could not know if the actor did other than prompted. The observer must have experienced both the researcher's command and the actor's behavior to know if the actor did other than prompted. For observers to make this attribution, there must have been a relationship between the researcher's prompt and the actor's behavior. While this example is somewhat obvious, it does provide a good template for the holistic nature of contextual attributions. Other aspects of the contexts are mutually interdependent as the researcher's prompt and the actor's behavior were for the observers' attributions to choice, but these other relationships may be harder to readily understand because of their complexity. As expected from the contextual perspective, any particular aspects of the context cannot be isolated from the other aspects of the context (see, e.g., Fuller, 1990; Heidegger, 1962; Heider, 1958). Instead, the context, as a whole, provides constraints for attributions. The context as a whole constrained observers' attributions to choice when considering the actor's behavior.

In this same way, the actor's behavior most likely also influenced actors' attributions even though this research could not determine how the actor's behavior constrained his or her attributions. As discussed earlier, most actors made a common choice in a particular situation, there were not enough actors who stayed *and* left in each context to determine if differences in the actors' behavior in those different contexts would predict differences in actors' attributions to choice. For example, when faced with a distressed person and a researcher's prompt to help, most of the actors stayed to help. It is possible that the actor's behavior also influenced his or her attributions to choice and possibly to disposition and situation as well. However, because

actors tended to almost unanimously choose the same behavior in all but the opposed options condition, there were not enough actors making the two different choices in each context to compare within actors attributions to the two different behaviors of staying or leaving.

Furthermore, with so few actors choosing a particular choice in a particular situation, it was not feasible to continue this study long enough to have enough actors distributed between choices that would allow for statistical analyses to assess the difference in attributions between actors who stayed and those who left. For example, when faced with a distressed confederate and asked to help, 29 actors helped and only one left. To have at least 30 actors who stay and leave in every context, 2,433 more actors would be required. For this reason, the current study could not statistically assess the impact of actor's behavior on attributions to choice, disposition, and situation. Further research can attempt to address if actors' attributions are also influenced by their different behaviors through a study that provides contextual cues for attributions while allowing for a more even distribution between choices.

This same further research could then address the difference between actors' and observers' attributions to choice, situation, and disposition as influenced by the context *and* by the actor's choice, particularly since this difference seems to provide some explanation for the differences between actors' and observers' attributions. As discussed earlier, in the current study, because of the low numbers of actors who made certain choices, attributions from observers who watched an actor stay *and* those who watched an actor leave were compared to attributions from actors who primarily made the same choice (stay or leave depending on the condition; see Table 3). If further research can allow for a more even distribution of actors' choices, then it can also compare actors' and observers' attributions to choice, disposition, and situation across contexts *and* as influenced by differences in the actor's choice.

Despite this limitation, this study did provide reasonable evidence supporting the contextual perspective because each attribution was influenced by the contextual cues of the study. Thus, while this study could not determine the impact of the actors' behaviors on actors' and observers' attributions for attributions to situation and disposition, it did suggest that actors and observers were influenced by the context, consistent with the contextual perspective (see, e.g., Heider, 1958; Reeder et al., 2008). One aspect of that context might have been the actor's choice. The nature of the actor's choice for actors' attributions to choice, disposition, and situation has yet to be determined. On the other hand, observers' attributions, at least to choice, are influenced by the actor's behavior.

#### Conclusion

This study supported the contextual perspective in at least three ways. First, the contextual manipulation of a distressed confederate and a researcher's prompt did constrain attributions to choice, disposition and situation as expected by the contextual perspective (see., e.g., Heider, 1958; Reeder et al., 2008). The contextual perspective claims that attributions to choice, disposition, and situation can be different than the attributions suggested by the traditional actor-observer effect in which actors attribute to the situation and observers attribute to disposition. For this study, the presence of a distressed confederate constrained actors to make attributions to disposition and observers to make attributions to choice and situation, a finding that is contrary to the traditional actor-observer effect and consistent with the contextual perspective. For example, I manipulated the presence of a distressed confederate, and her presence altered attributions to choice, to being helpful, sympathetic, and ethical, and to the confederate's behavior. These changes in attributions were the result of the attributions being mutually interdependent as expected by the contextual perspective. Thus, actors attributed their

behavior to the distressed confederate, made higher attributions to being a helpful and sympathetic person because of the presence of a distressed confederate, and felt they were responsible to make a choice that helped the confederate. When the distressed confederate was foregrounded for actors, the context was changed and so were actors' attributions to choice, disposition, and situation. While the traditional actor-observer effect expects that, depending on the role, actors primarily make the same type of attributions and observers primarily make the same type of attributions, the contextual perspective allows the context to constrain attributions as was found in this study.

Second, the context of a distressed confederate and a researcher's prompt constrained attributions to choice, disposition, and situation *differently* for actors and observers as expected by the contextual perspective. Thus, the contextual perspective accounts for the different constraints that role may play in attributions, but also allows for other constraints to influence attributions. Proponents of the contextual perspective, such as Reeder et al. (2008) and Heider (1958), do not discount the importance of role, but they do expect the role of actor or observer to be part of a context that constrains attributions. In this way, the contextual perspective most likely can account for past research on the traditional actor-observer effect because one aspect of context is the role of the person making attributions. However, the contextual perspective is not simply an addition to the traditional perspective because the contextual perspective claims that attributions are influenced by a holistic context instead of independent aspects of the situation as the traditional actor-observer effect. The traditional actor-observer effect mistakes one aspect of the context as the only aspect of the context that influences actors' and observers' attributions instead of understanding each aspect as part of a whole context. Further research would be

required to understand the explanatory power of the contextual perspective, especially in relation to past research from the perspective of the traditional actor-observer effect.

Third, the *relationship* between the contextual aspects, such as between the researcher's prompt and the actor's behavior, constrained attributions as expected by the contextual perspective. For phenomenologists such as Levinas (1969) and Heidegger (1962), it is the relationship between aspects of a context, or the mutually interdependent nature of the context, that provides constrains on attributions. For example, the relationship between actor's behavior and the researcher's prompt constrained observers' attributions to choice. As another example, the relationship between the presence of a distressed confederate and the researcher's prompt constrained actors' attributions to choice, ethical beliefs, being a sympathetic and helpful person, and the confederate's behavior. This emphasis on the relationship among aspects of the context is the primary difference between the traditional actor-observer effect and the contextual perspective. While past research on the actor-observer effect may be explainable using the contextual perspective, the explanations from the contextual perspective come from the holistic understanding of the context, and would need to rely more on Gestalt and phenomenological concepts that understand context as holistic. Fuller (1990) and Faulconer and Williams (1990) provide good discussion about how a phenomenological perspective would enhance psychological science (see also, Downs, Gantt, & Faulconer, 2012). Thus, past research cannot simply be incorporated into the contextual perspective. Instead, the research must be reunderstood in the context of the contextual perspective. Just as the relationship between the researcher's prompt and the actor's behavior changed the meaning of attributions to choice for observers, the relationship of the contextual perspective and past research on the actor-observer effect changes the meaning of the past research. In particular, past research cannot be

understood as evidence that actors primarily make attributions to the situation and observers primarily make attributions to the actor's disposition. Instead, actors and observers are making attributions to choice, situation, and disposition, and their attributions to any particular aspect of the context are constrained by and constrain their attributions to the other aspects of the context. A particular aspect of the context may be foregrounded, but this study showed that all aspects are in a holistic relationship and cannot be properly understood independent of each other. In this sense, the nuanced approach of the contextual perspective provides the foundation for a more nuanced understanding of human attributions.

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## **Appendix A: Materials**

#### **Dissertation Attribution Questions**

- 1. I made the decision that I did because of the other participant's behavior (S)
- 2. I made the decision that I did because I felt it was the only option given the situation. (S)
- 3. I made the decision that I did because of my personal ethical beliefs. (D)
- 4. I made the decision that I did because I am a helpful person. (D)
- 5. I made the decision that I did because I do not like confrontation. (D)
- 6. I made the decision that I did because I was prompted to by the researcher. (S)
- 7. I made the decision that I did because it alleviated the tension I felt [in the room]. (S)
- 8. I made the decision that I did because [I felt] the research depended on me. (S)
- 9. I made the decision that I did because I am a non-conformist person. (D)
- 10. I made the decision that I did because I am a sympathetic person. (D)
- 11. I made the decision that I did because I realized I had a choice. (C)
- 12. I made the decision that I did because I weighed the pros and cons of each decision and came to a conclusion. (C)
- 13. I made the decision that I did because I recognized, in the situation, that I can make choices. (C)
- 14. I made the decision that I did because the need for a choice was prominent. (C)

# **Demographics Questionnaire**

- 1. What is your age?
- 2. What is your sex?
  - a. Male
  - b. Female
- 3. What is your race?
  - a. White
  - b. Hispanic
  - c. African-American
  - d. Asian
  - e. Pacific Islander
  - f. Native American
  - g. Other
  - h. Choose not to respond
- 4. What is your marital status?
  - a. Single-Never Married
  - b. Married
  - c. Divorced/Widowed
- 5. What is your year in school?
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior
  - e. Graduate level
  - f. Not a student
- 6. What is your religious affiliation?
  - a. Protestant Christian
  - b. Roman Catholic
  - c. Evangelical Christian
  - d. Latter-day Saint (Mormon)
  - e. Jewish
  - f. Muslim
  - g. Hindu
  - h. Buddhist
  - i. Other:
- 7. How many psychology classes have you taken (including high school)?
- 8. How many social psychology classes have you taken (including high school)?
- 9. Are you planning on entering into a field or graduate program directly related to psychology?
  - a. Yes
  - b. No

### Script

Researcher(R) Confederate Actor(C) Participant(P)

# Part 1 (the part that is constant across the first three groups):

*C* will arrive late, *P* will be led to believe that *C* is another participant.

C: Sorry I'm late! My class got out a little late.

R: That's alright. Thank you for making it here today. We would like to welcome you both to our study. Before we start, we will have you read and sign this consent form.

Consent Form distributed and then collected.

R: Thank you. Now as you read, the purpose of this study is to examine the effects of mild electric stimulation on learning. Now keep in mind that this stimulation, although they may be slightly uncomfortable at times, are not dangerous by any means. One of you will be the subject and one of you will be the watcher. The subject will be asked to remember a list of words that grow longer with each correct answer. If the subject answers incorrectly, he will receive a mild stimulation from this device. The watcher will be asked to record any thoughts they have about the experience of the subject. Any questions?

(Pause for questions)

We are going to draw lots to decide.

C and P then draw lots to decide who will be the watcher. Lots will be rigged so that P will always be the watcher.

R: Okay, (points to P) you will be the watcher and (points to C) you will be the subject. Let's (pointing at C) go into this room (indicate adjacent room with a window through which P can see into adjacent room from current room) where the learning trial will begin.

R returns to room with C and then R suddenly remembers that he has to administer a small shock to P.

R: I almost forgot! I need to administer a small stimulation to you (P) to show that it is not very painful but it can be a bit uncomfortable so that you know what the subject is experiencing.

R shows electric stimulation device (actually a massage device that uses electricity to stimulate muscles). Then R administers one brief shock at the lowest setting to P.

R returns to room with C and pretends to administer shocks according to the trials.

R: Now I will read a series of word sets, and you will be expected to repeat them back to me. Whenever you miss a word or the order of the words, you will receive a slight stimulation. The first word set is "Hat, Ball, Girl, Snow, Cat"

C: "Hat, Ball, Girl, Snow, Cat"

R: Correct. The next word set is "Sock, Bowl, Ring, Man, Hand, Table"

C: "Sock, Bowl, Ring, Man, Hand, Table"

R: Correct. The next word set is "Map, Sand, Bear, Tall, House, Flower, Icon"

C: "Map, Sand, Bear, (Hesitates) House, Tall, Flower, Icon"

R: Incorrect. (R administers stimulation).

C winces as if in pain but trying to hide it.

R: The next word set is "Car, Boy, Boat, Fruit, Table, Man, Sleep"

C: "Car, Boy, Boat, Fruit, Table, Man, Sleep"

R: Correct. The next word set is "Book, Race, School, Stick, Work, Umbrella, Coin, Laundry"

C: "Book, Race, School, Stick, (hesitates) Work, Umbrella, Coin, Laundry"

R: Correct. The next word set is "Mom, Box, Toy, Song, Gun, Phone, Computer, Rat, Daisy"

C: "Mom, Toy, Box, Song, Gun, (hesitates) Computer, Rat, Daisy, (hesitates a little longer), Flower (says as if guessing)"

R: Incorrect. (*R administers second stimulation*)

C winces again, this time not as able to hide it. He also acts a little tense.

R: The next word set is "Rice, Page, Shirt, Nail, Rope, Canyon, Hair, Diet, Outlet"

C: "Rice, Page, (hesitates) Shirt, Nail, Rope, Canyon, Hair, (hesitates) Diet, Outlet"

R: Correct. The next word set it "Tax, Can, Toe, Bed, Film, Stem, Man, Plane, Cave, Shoe"

C: "Tax, Can, Bed, Toe, (hesitates) Film, (hesitates) Flower, Man, Stem, (hesitates) Cave, Shoe"

R: Incorrect. (*R administers third stimulation*)

C winces even more severely, and starts to get nervous and look around, as if trying to find a

way out.

R: The next word set is "Bread, Hook, Soda, Cup, Road, Line, Seven, Purple, Paper, Mouse"

C: "Bread, Book, (hesitates) Soda, Cup, Road, (hesitates) Line, Six, Pink, Paper, Mouse (hurried says the last part as if to get it over with)"

R: Incorrect. (*R administers fourth stimulation*)

C nearly lets out a squeal of pain, and becomes very agitated. Her breathing starts to get heavier and heavier. She then begins to scrape at the spot on her skin where the latest stimulation was delivered.

C: (*With a shaking voice*) Ok that's enough! I didn't think it was going to be a big deal, but I have to say something now. When I was a kid I was electrocuted pretty badly as I was climbing over an electric fence. I thought I had gotten over the trauma, but this is bringing it all back for me. I don't think I can handle any more.

R: Are you sure? We really need you to continue.

C: (Still extremely agitated) Yeah, I need to stop.

R: (Hesitates) OK

*R leaves the room and approaches the participant.* 

\*\*At this point, the script divides into the first three groups.

### **Ambiguous Options Group:**

R: She is not going to be able to complete her part of the experiment due to some childhood trauma relating to electricity. Someone else must finish it. You may either help by switching places (*indicates that the confederate and participant would switch positions*) or you may leave and the research will continue

R does not give any mandate one way or the other.

#### **Explicitly Opposed Options Group:**

R: She is not going to be able to complete her part of the experiment due to some childhood trauma relating to electricity. Someone else must finish it. You may either help by switching places (*indicates that the confederate and participant would switch positions*) or you may leave and the research will continue. I would really like you to leave.

#### **Congruent Options Group:**

R: She is not going to be able to complete her part of the experiment due to some childhood trauma relating to electricity. Someone else must finish it. You may either help by switching places (*indicates that the confederate and participant would switch positions*) or you may leave

and the research will continue. I would really like you to help (continues to gesture toward the chair).

\*\*The subgroups in the Unilateral Options Group will go through the entire script up until the point where the first three groups divide, but the only difference is that the Confederate will not act as if they are agitated and there will be no account of a childhood trauma.

## **Unilateral Options Group A:**

R approaches the participant.

R: At this point you can either continue to help by switching positions (*indicates that the confederate and participant would switch positions*) or you may leave and the research will continue. I would really like you to continue to help

# **Unilateral Options Group B:**

R approaches the participant.

R: At this point you can either help (*indicates that the confederate and participant would switch positions*) or you may leave and the research will continue. I would really like you to leave.

## **All Groups:**

At this point the researcher will record the decision of the participant to either stay or leave and inform the participant that the trials do not, in fact, need to continue. Instead, the researcher will give the participant (and the confederate) some questions to answer about his or her experience (see the section titled Measurements). After the participant completes the questionnaire, he or she will be fully debriefed, including informed of the deception, introduced to the confederate as a confederate, and provided information of counseling services available, and dismissed.

# **Appendix B: Tables and Figures**

Table 1

Expected level of attributions to choice by context, with justification

Level of Attributions to Choice	Context	Justification
Highest	Explicitly Opposing Constraints	Experience of person in need and researcher's prompt are directly opposed.
Second highest	Implicitly Opposing Constraints	Experience of the person in need and the desire to alleviate tension by leaving are opposed without an explicit researcher prompt.
Third highest	Congruent Constraints	Experience of person in need and researcher's prompt indicate the same choice.
Lowest	Unilateral Constraint	The only active constraint on behavior is the researcher's prompt even though the option to disobey is still present.

Table 2
Graphical presentation of research conditions based on foregrounding of choice by actor/observer

	Actors (5 groups) <sup>a</sup>	Observers (10 videos) <sup>b</sup>			
		Watch Leaver	Watch Helper		
Explicit Opposed	Experience Distressed Confederate Present 2 Options Researcher Prompts to Leave	Watch leaver in the explicit exposed condition $(n = 32)$	Watch helper in the explicit exposed condition $(n = 35)$		
Empheri opposed	Let Choose $n = 30$	Video 1	Video 2		
Ambiguous	Experience Distressed Confederate Present 2 Options No Researcher Prompt about Options	Watch leaver in the ambiguous condition $(n = 32)$	Watch helper in the ambiguous condition $(n = 33)$		
Amorguous	Let Choose $n = 30$	Video 3	Video 4		
Congruent	Experience Distressed Confederate Present 2 Options Researcher Prompts to Help	Watch leaver in the congruent condition $(n = 32)$	Watch helper in the congruent condition $(n = 30)$		
Congruent	Let Choose $n = 30$	Video 5	Video 6		
	Do Not Experience Distressed Confederate Present 2 Options Researcher Prompts to Help	Watch leaver in the unilateral state condition $(n = 31)$	ay Watch helper in the unilateral stay condition $(n = 31)$		
Unilateral Help	Let Choose $n = 30$	Video 7	Video 8		
H. T. A. a. I. I. a.	Do Not Experience Distressed Confederate Present 2 Options Researcher Prompts to Leave	Watch leaver in the unilateral leave condition $(n = 32)$	Watch helper in the unilateral leave condition $(n = 31)$		
Unilateral Leave	Let Choose $n = 30$	Video 9	Video 10		

 $<sup>\</sup>overline{a}_{n} = 150$ .  $b_{n} = 319$ , roughly 30 per video

Table 3
Actors' decision to stay or leave by condition

Choice	Explicit Opposed	Ambiguous	Congruent	Unilateral Help	Unilateral Leave	Total
Stay	13	28	29	29	5	104
Leave	17	2	1	1	25	46
Total	30	30	30	30	30	150

 $\chi^2$  (4, N = 150) = 77.89, p < 0.001

Table 4

Correlation matrix for the actors' attributions to the four choice questions

<i>J</i>		J		
	1	2	3	4
Realized a     Choice	1.000			
2. Weighed Pros/Cons	0.310	1.000		
3. Recognized Choice	0.767	0.479	1.000	
4. Need for Choice Prominent	0.554	0.354	0.603	1.000

Table 5

Correlation matrix for the observers' attributions to the four choice questions

	1	2	3	4
Realized a     Choice	1.000			
2. Weighed Pros/Cons	0.988	1.000		
3. Recognized Choice	0.777	0.787	1.000	
4. Need for Choice Prominent	0.389	0.391	0.468	1.000

Table 6

Correlation matrix for the actors' and observers' combined attributions to the four choice questions

	1	2	3	4
1. Realized a Choice	1.000			
2. Weighed Pros/Cons	0.686	1.000		
3. Recognized Choice	0.771	0.651	1.000	
4. Need for Choice Prominent	0.453	0.375	0.523	1.000

Table 7

Correlation matrix for the actors' and observers' combined attributions to the five dispositional questions

	1	2	3	4	5
1. Ethical Belie	fs 1.000				
2. Helpful Perso	on 0.515	1.000			
3. Not Like Confrontation	0.051	0.125	1.000		
4. Non-Conform	nist 0.045	0.039	0.090	1.000	
5. Sympathetic Person	0.505	0.590	0.052	0.131	1.000

Table 8

Correlation matrix for the actors' and observers' combined attributions to the five situational questions

J			J	1	
	1	2	3	4	5
Other Participant	1.000				
2. Only Option	0.032	1.000			
3. Prompted by Researcher	-0.131	0.419	1.000		
4. Alleviated Tension	0.283	0.130	0.197	1.000	
5. Depended on Me	0.133	0.281	0.306	0.157	1.000

Table 9

Post hoc comparisons between observers who saw an actor stay and those who saw an actor leave by condition for the four choice questions

Condition	Question	Stay/Leave	Mean	SD	p value
Unilateral Leave	Realized a Choice	Stay	4.68	1.96	0.121
	Realized a Choice	Leave	3.94	1.78	
	Weighed Pros/Cons	Stay	4.65	1.99	0.142
	weighed 1105/Cons	Leave	3.94	1.78	
	Recognized Choice	Stay	4.58	1.79	0.072
	Recognized Choice	Leave	3.78	1.68	
	Need for Choice Prominent	Stay	3.87	1.75	_
	Need for Choice Fromment	Leave	3.87	1.88	
Unilataral Halm	Realized a Choice	Stay	3.97	1.35	< 0.000
Unilateral Help	Realized a Choice	Leave	5.39	1.54	
	Weighted Dress/Cons	Stay	3.97	1.40	< 0.000
	Weighed Pros/Cons	Leave	5.39	1.54	
	Danagrinad Chaine	Stay	4.06	1.39	0.004
	Recognized Choice	Leave	5.10	1.33	
	Name of Concession Description	Stay	4.16	1.61	
	Need for Choice Prominent	Leave	4.29	1.61	
C	Realized a Choice	Stay	3.83	1.23	< 0.000
Congruent		Leave	5.31	1.33	
	Weighed Pros/Cons	Stay	3.83	1.18	< 0.00
		Leave	5.31	1.49	
	Recognized Choice	Stay	3.77	1.07	0.001
		Leave	5.06	1.63	
	Need for Choice Prominent	Stay	4.53	1.33	_
		Leave	4.78	1.54	
A 1:	D 1' 1 Cl '	Stay	4.15	1.64	< 0.00
Ambiguous	Realized a Choice	Leave	5.63	1.24	
	W.: 1 1D /G	Stay	4.15	1.64	< 0.00
	Weighed Pros/Cons	Leave	5.75	1.05	
	5 1 1 01 1	Stay	4.09	1.84	< 0.000
	Recognized Choice	Leave	5.59	1.16	
	N. 10 Gl : D :	Stay	5.09	1.61	
	Need for Choice Prominent	Leave	5.12	1.58	
Explicit	5 11 1 GI	Stay	5.06	1.21	0.001
Opposed	Realized a Choice	Leave	3.84	1.69	3.001
- r r	W 1 15 /6	Stay	5.06	1.21	0.001
	Weighed Pros/Cons	Leave	3.84	1.98	
		Stay	5.09	1.07	0.002
	Recognized Choice	Leave	3.97	1.68	0.002
	Need for Choice Prominent	Stay	5.17	1.01	
	1.000 for Choice I folimitelit	Leave	4.79	1.37	

Table 10

Post hoc comparisons between actors and observers for the four choice questions

Condition	Question	Actor/Observer	Mean	SD	p value
Unilateral Leave	Realized a Choice	Actor	4.10	2.25	_
Omiateral Leave	Realized a Choice	Observer	4.48	1.57	
	Weighed Pros/Cons	Actor	3.60	2.21	
	weighed 1105/Cons	Observer	4.48	1.57	
	Recognized Choice	Actor	4.00	2.27	_
	Recognized Choice	Observer	4.55	1.49	
	Need for Choice Prominent	Actor	3.93	2.20	0.120
	Need for Choice Fromment	Observer	4.79	1.37	
Unilataral Halm	Realized a Choice	Actor	4.43	1.78	_
Unilateral Help	Realized a Choice	Observer	4.88	1.63	
	Waishad Daas/Cana	Actor	3.47	2.01	
	Weighed Pros/Cons	Observer	4.94	1.53	
	Described Chains	Actor	4.03	2.04	
	Recognized Choice	Observer	4.83	1.71	
	No. 1 Co. Chaire Donning	Actor	3.37	1.78	0.014
	Need for Choice Prominent	Observer	5.11	1.58	
C	Realized a Choice	Actor	5.33	1.77	
Congruent		Observer	4.60	1.55	
	Weighed Pros/Cons	Actor	3.67	1.86	_
		Observer	4.60	1.53	
	Recognized Choice	Actor	4.90	1.75	
		Observer	4.44	1.52	
	Need for Choice Prominent	Actor	4.67	1.71	0.987
		Observer	4.66	1.44	
A 1.	D 1: 1 Cl :	Actor	5.27	1.55	_
Ambiguous	Realized a Choice	Observer	4.68	1.61	
	W. 1 1 D /C	Actor	3.93	1.95	_
	Weighed Pros/Cons	Observer	4.68	1.63	
	D ' 1.Cl '	Actor	4.93	1.53	_
	Recognized Choice	Observer	4.58	1.44	
	N. 10 Cl. D.	Actor	5.10	1.50	< 0.000
	Need for Choice Prominent	Observer	4.23	1.60	
Explicit	D 1: 1 CI :	Actor	4.57	2.22	
Opposed	Realized a Choice	Observer	4.30	1.89	
11	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Actor	3.90	2.06	_
	Weighed Pros/Cons	Observer	4.29	1.90	
	D	Actor	4.13	1.93	
	Recognized Choice	Observer	4.17	1.77	
	Need for Choice Prominent	Actor	4.53	2.08	0.021
		Observer	3.87	1.80	<u>-</u> 1

Table 11

Post hoc comparisons between actors and observers by condition for five dispositional questions

Condition	Question	Actor/Observer	Mean	SD	p value
Unilateral Leave	Ethical Beliefs	Actor	3.17	1.98	0.007
	Etinour Bonots	Observer	4.30	1.79	
	Helpful Person	Actor	4.17	2.04	0.917
	Trespital Ferson	Observer	4.21	1.79	
	Sympathetic Person	Actor	4.27	2.07	0.033
	Symposite 1 elsen	Observer	5.10	1.61	
	Non-Conformist	Actor	2.60	1.35	0.842
		Observer	2.66	1.26	
	Doesn't Like Confrontation	Actor	4.07	1.66	_
		Observer	4.45	1.41	
Unilateral Help	Ethical Beliefs	Actor	4.00	2.07	0.378
		Observer	4.34	1.55	
	Helpful Person	Actor	5.00	1.72	0.023
		Observer	4.12	1.72	
	Sympathetic Person	Actor	4.63	1.54	0.632
	Sympathetic 1 cison	Observer	4.80	1.58	
	Non-Conformist	Actor	2.83	1.80	0.893
	Tron Comornist	Observer	2.88	1.29	
	Doesn't Like Confrontation	Actor	3.87	2.11	_
	Doesn't Like Confrontation	Observer	4.28	1.64	
Congruent	Ethical Beliefs	Actor	5.00	1.91	0.008
		Observer	4.00	1.52	
	Helpful Person	Actor	5.73	1.23	< 0.00
		Observer	3.85	1.81	
	Sympathetic Person	Actor	5.50	1.43	0.033
		Observer	4.77	1.54	
	Non-Conformist	Actor	3.27	1.29	0.409
		Observer	3.00	1.52	
		Actor	3.97	2.13	
	Doesn't Like Confrontation	Observer	3.90	1.72	
Ambiguous	511 15 H A	Actor	4.53	2.13	0.029
	Ethical Beliefs	Observer	3.66	1.56	****
		Actor	5.27	1.44	< 0.00
	Helpful Person	Observer	3.77	1.64	
		Actor	5.57	1.48	< 0.000
	Sympathetic Person	Observer	3.92	1.75	0.00
		Actor	3.17	1.60	0.787
	Non-Conformist	Observer	3.23	1.47	0.707
		Actor	3.67	1.88	
	Doesn't Like Confrontation	Observer	3.73	1.56	
Explicit		Actor	4.27	2.24	0.734
Opposed	Ethical Beliefs	Observer	4.11	1.97	0.754
		Actor	5.23	1.61	0.004
	Helpful Person	Observer	4.06	1.84	0.004
		Actor	5.63	1.45	0.002
	Sympathetic Person	Observer	4.38	1.43	0.002
	Non-Conformist	Actor	3.70	1.77	< 0.000
	NOII-COIIIOIIIIISt	Observer	2.40	1.77	< 0.000
				2.17	
		Actor	3.80	9.17	

Table 12 Post hoc comparisons between actors and observers by condition for five situational questions

Condition	Question	Actor/Observer	Mean	SD	p value
Unilateral Leave	Other Participant's Behavior	Actor	3.53	2.13	< 0.000
		Observer	5.94	1.21	
	Only Option	Actor	4.90	1.90	
	- J - F	Observer	3.88	1.70	0.000
	Prompted by Researcher	Actor	5.50	2.29	0.008
	1 ,	Observer	4.18	2.20	
	Alleviated Tension	Actor	3.83	1.91	
		Observer	5.58	1.22	
	Research Depended on Me	Actor	3.30	2.00	
II:latanal II.alm		Observer	3.57	1.86	< 0.000
Unilateral Help	Other Participant's Behavior	Actor		1.98	< 0.000
	<del>-</del>	Observer	5.94 3.37	0.97	
	Only Option	Actor		1.92	
		Observer	3.58	1.89	0.041
	Prompted by Researcher	Actor	4.50	2.03	0.041
		Observer	3.62	1.89	
	Alleviated Tension	Actor	3.30	1.86 1.51	_
		Observer	5.31		
	Research Depended on Me	Actor	4.30	2.02	
C	1	Observer	3.57	1.97	0.427
Congruent	Other Participant's Behavior Only Option	Actor	5.23	1.98	0.427
		Observer	5.53	1.52	
		Actor	4.37	1.59	
		Observer	3.73	1.81	0.010
	Prompted by Researcher  Alleviated Tension	Actor	3.93	2.05	0.818
		Observer	3.82	2.21	
		Actor	3.87	1.98	
		Observer	4.92	1.84	
	Research Depended on Me	Actor	3.97	1.97	
A1	<u>-</u>	Observer	3.50	2.23 1.52	< 0.000
Ambiguous	Other Participant's Behavior	Actor	5.57		< 0.000
	-	Observer	3.77	2.00	
	Only Option	Actor			
		Observer	3.21	2.05 1.85	0.120
	Prompted by Researcher	Actor	2.97	2.38	0.128
		Observer	3.73		
	Alleviated Tension	Actor	3.83 4.44	1.74	
		Observer Actor	3.97	1.69	
	Research Depended on Me	Observer			_
E-mlinit		Actor	3.02 4.67	1.89 2.35	0.061
Explicit Opposed	Other Participant's Behavior	Observer			0.061
Opposed		Actor	3.81 4.60	1.87	
	Only Option	Observer			_
	<del>-</del>	Actor	3.76	2.05	0.164
	Prompted by Researcher	Observer			0.104
	Alleviated Tension		4.37	2.36	
	Alleviated Tension	Actor	3.57	1.96	
		Observer	4.92 3.77	1.69	
	Research Depended on Me	Actor		2.11	
	ates questions that were not significantly	Observer	2.98	1.80	

Table 13

Observer: Post-hoc condition comparisons for the significant choice question, "The watcher made the decision that she did because the need for a choice was prominent"

Condition	Mean	Standard Deviation	
Ambiguous	5.11 <sub>a, b</sub>	1.58	
Explicit Opposed	4.79 a, c	1.37	
Congruent	4.66 a	1.44	
Unilateral Help	4.23	1.60	
Unilateral Leave	3.87	1.80	
Total	5.08	1.69	

Note. Subscripts indicate significant mean differences.

 $_{\rm a}p$  < 0.01 compared with the unilateral leave options condition.  $_{\rm b}p$  < 0.01 compared with the unilateral help options condition.  $_{\rm c}p$  < 0.05 compared with the unilateral help options condition.

Table 14

Post-hoc condition comparisons for actors and observers for the three situational questions using estimated marginal means

Question	Condition	Mean	Standard Deviation	Estimated Marginal Mean
	Congruent	5.43	1.91	5.38 <sub>a</sub>
I made the decision that I did because of the other participant's behavior	Unilateral Help	5.16	2.13	4.70
	Ambiguous	4.36	2.24	4.67
	Unilateral Leave	5.02	2.07	4.61
	Explicit Opposed	4.09	1.98	4.24
_	Total	4.81	2.13	4.72
I made the decision that I felt it was the only option give the situation	Unilateral Leave	4.20	1.23	4.39 <sub>b, c</sub>
	Explicit Opposed	4.12	1.43	4.18 <sub>b. d</sub>
	Congruent	3.93	1.61	4.05 <sub>e</sub>
	Unilateral Help	3.52	1.72	3.48
	Ambiguous	3.33	2.04	3.39
	Total	3.80	1.69	3.90
	Unilateral Leave	4.59	1.45	4.71 <sub>f</sub>
I made the decision that I did because I was prompted to by the researcher	Congruent	3.86	1.48	4.39
	Unilateral Help	3.89	1.43	4.30
	Explicit Opposed	4.12	1.54	4.24
	Ambiguous	3.48	2.07	4.13
	Total	3.99	1.69	4.35

*Note*. Estimated marginal means are displayed, and at times differ from actual means, because the cell sample sizes differ between actors and observers. Subscripts indicate significant mean differences.

 $_{\rm a}$   $p \le 0.01$  when compared to the other four conditions.  $_{\rm b}$  p < 0.01 when compared to the ambiguous options condition.  $_{\rm c}$  p < 0.01 when compared to the unilateral help options condition.  $_{\rm d}$  p < 0.05 when compared to the unilateral help options condition.  $_{\rm c}$  p < 0.05 when compared to the congruent options condition.  $_{\rm f}$  p < 0.05 when compared to the other four conditions.

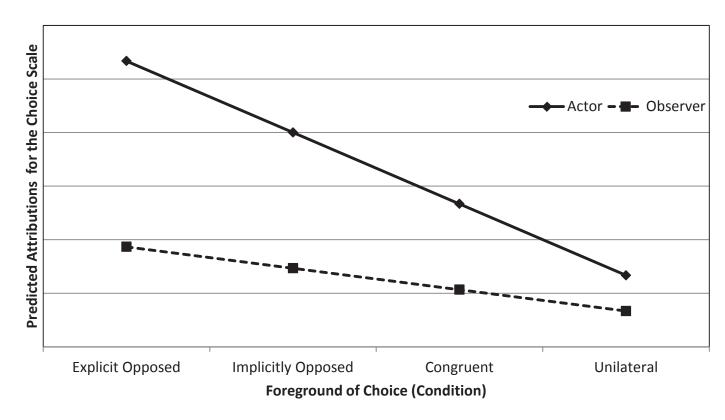


Figure 1. The hypothesized interaction between actors and observers and foreground of choice for attributions to choice.

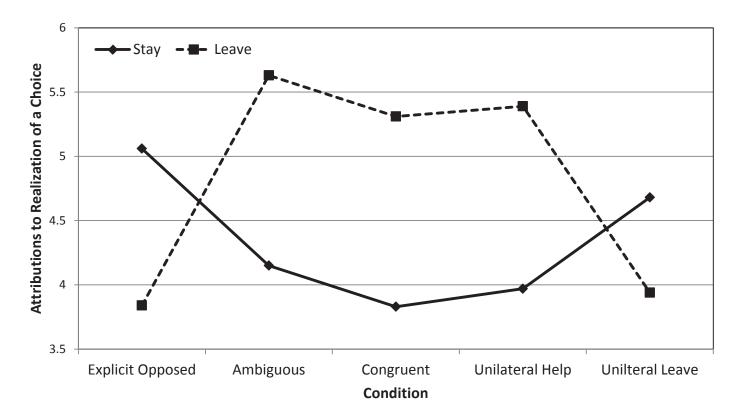


Figure 2. Interaction of observers who saw an actor stay and those who saw an actor leave for the choice question,

<sup>&</sup>quot;The watcher made the decision that she did because she realized she had a choice."

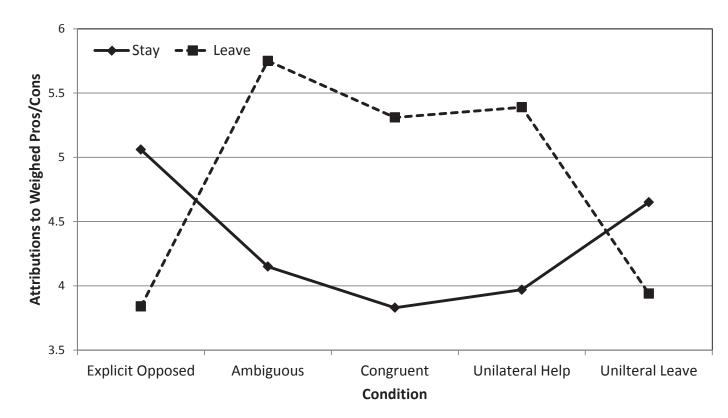


Figure 3. Interaction of observers who saw an actor stay and those who saw an actor leave for the choice question, "The watcher made the decision that she did because she weighed the pros and cons of each decision and came to a conclusion."

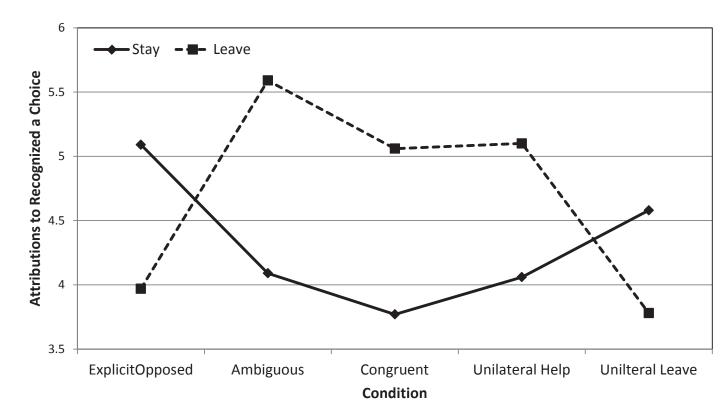


Figure 4. Interaction of observers who saw an actor stay and those who saw an actor leave for the choice question,

<sup>&</sup>quot;The watcher made the decision that she did because I recognized, in the situation, that she can make choices."

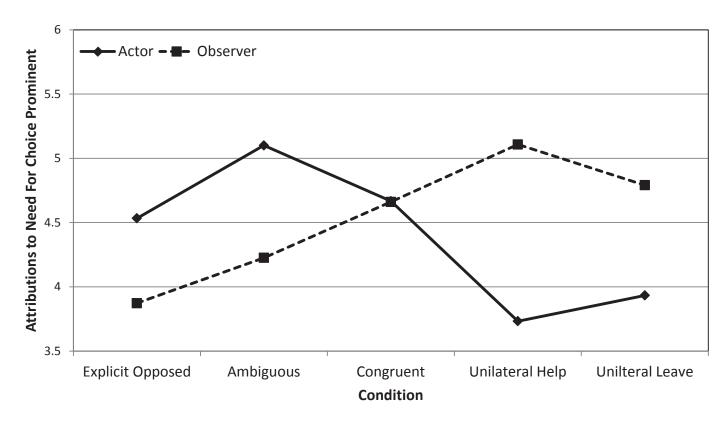


Figure 5. Interaction of actor or observer by condition for the choice question, "The watcher made the decision that she did because the need for a choice was prominent."

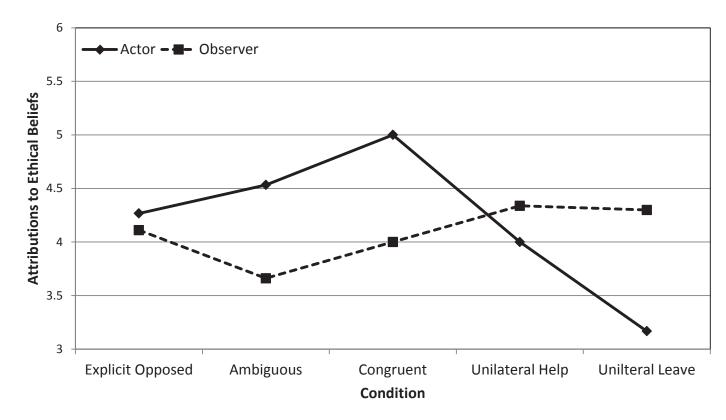


Figure 6. Interaction of actor or observer by condition for the disposition question, "I made the decision that I did because of my personal ethical beliefs."

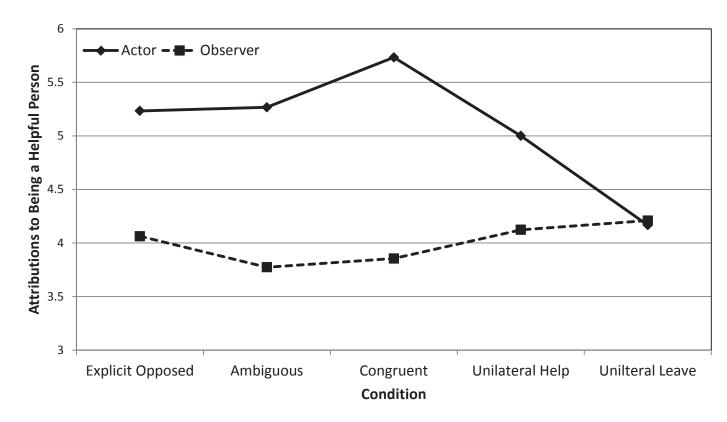


Figure 7. Interaction of actor or observer by condition for the disposition question, "I made the decision that I did because I am a helpful person."

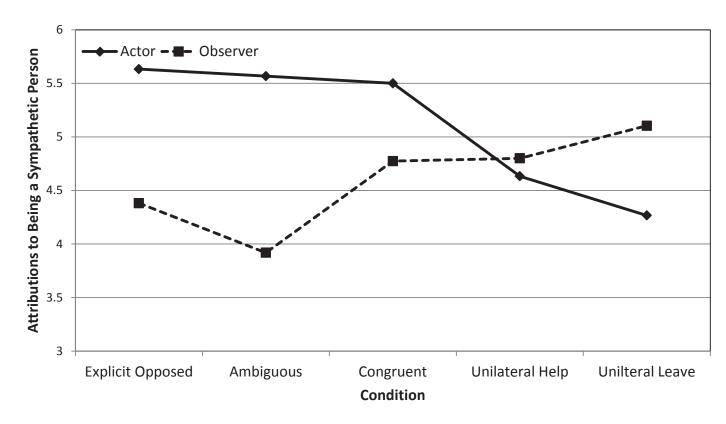


Figure 8. Interaction of actor or observer by condition for the disposition question, "I made the decision that I did because I am a sympathetic person."

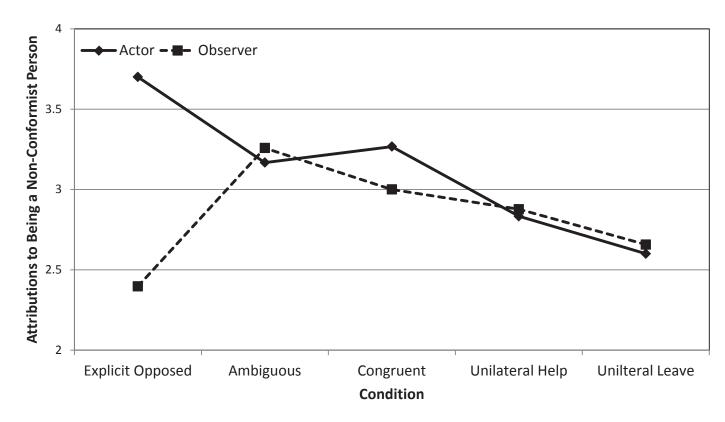


Figure 9. Interaction of actor or observer by condition for the disposition question, "I made the decision that I did because I am a non-conformist person."

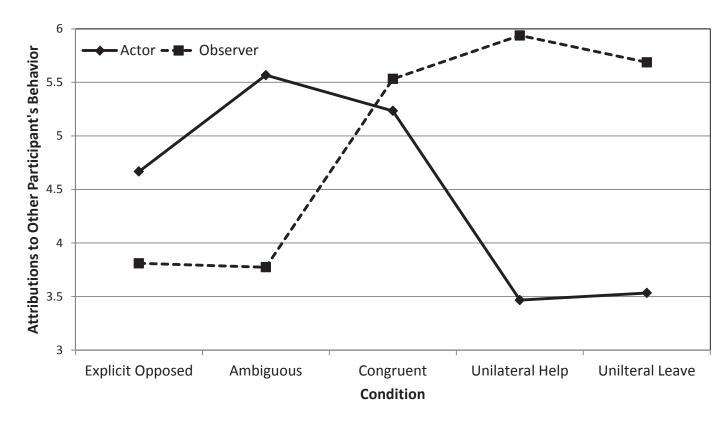


Figure 10. Interaction of actor or observer by condition for the situational question, "I made the decision that I did because of the other participant's behavior."

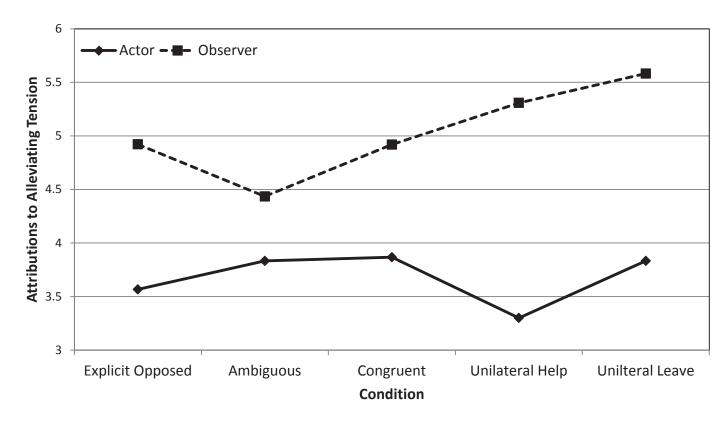


Figure 11. Interaction of actor or observer by condition for the situational question, "I made the decision that I did because it alleviated the tension."

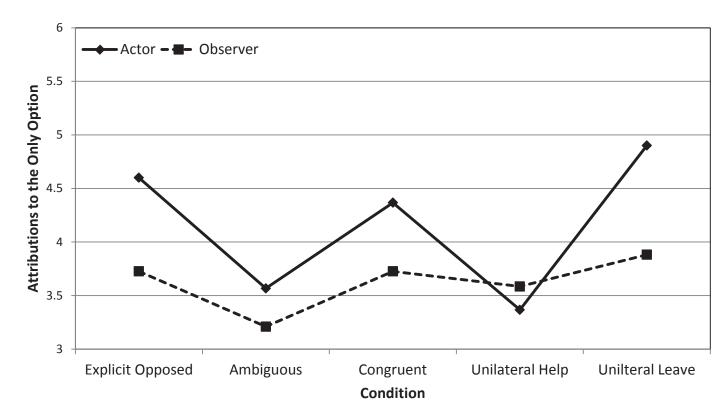


Figure 12. Interaction of actor or observer by condition for the situational question, "I made the decision that I did because I felt it was the only option given the situation."

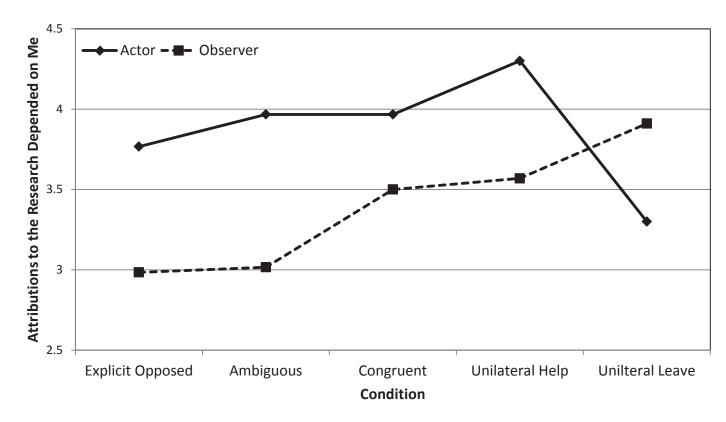


Figure 13. Interaction of actor or observer by condition for the situational question, "I made the decision that I did because I felt the research depended on me."

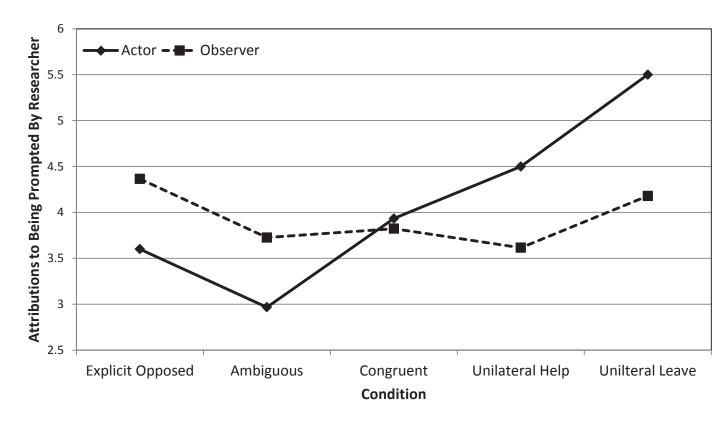


Figure 14. Interaction of actor or observer by condition for the situational question, "I made the decision that I did because I was prompted by the researcher."