Ambivalence and the Attitude Similarity Effect on Attraction

THESIS

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Abstract

Past research has robustly shown that people like others when attitudes are shared, and dislike those who oppose their attitudes. Other research examining strength-related properties of attitudes has found, however, that not all attitudes predict behavior equally well. Little research has considered the role of these properties on attitude similarity and interpersonal attraction. Across two studies, I provide the first known investigation of whether one of these strength-related properties, attitudinal ambivalence, might moderate effects of attitude similarity on attraction. Ambivalence involves mixed positive and negative reactions toward an attitude object, leading an ambivalent attitude to be weaker than an attitude comprised primarily of positive or negative reactions. An attitude strength approach, then, would suggest that univalent attitudes ought to predict liking of a target based on the (un)shared attitude. However, the conflict of inconsistent reactions is distinctly uncomfortable, creating a motive to reduce the conflict. This motive might lead one to seek resources that could help resolve the ambivalence. In the first study, I provide evidence consistent with an attitude strength pattern, with ambivalent attitudes attenuating attitude-consistent target liking. In the second study, the attitude strength pattern is replicated, but only when prior knowledge is high and the target less able to provide unfamiliar information that could reduce the ambivalence. When prior knowledge is low and the target more capable of serving as an ambivalence reduction resource, ambivalent attitudes are more predictive of attraction.
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Chapter 1: Introduction

An apparent consistency that has emerged across the study of social psychology is just that – the desire for consistency, a common thread whereby behaviors, beliefs, and attitudes are organized in a way that holds meaning and makes sense to the perceiver. Seeking consistency has been demonstrated in myriad phenomenological observations of human cognition and behavior, including beliefs that the world operates in accordance with just principles (Lerner, 1980) and people are responsible for their actions (Ross & Nisbett, 1991). Other theories have identified a desire for intrapsychic consistency, leading to feelings of discomfort when contradictory cognitions, behaviors (Festinger, 1957), or self-discrepancies (Higgins, 1987) arise. Living in a social world as we do, it would seem unlikely that such a preference for consistency would fail to affect our interpersonal relations. Indeed, consistency underlies the basis of attraction, the focus of the present research: we want to associate ourselves with people who are like us, and disassociate ourselves from people unlike us.

Heider’s balance theory (1946, 1958) served as the theoretical framework for the attraction tenet, positing that people desire to hold a congruent set of relations in an interpersonal context. Conceptualized as a triad consisting of a person or perceiver (P), other (O), and object (X), the triad is said to be in harmony when the person who is favorable toward the other shares the same sentiment, or attitude, toward the object, as well as when the person unfavorable toward the other holds a different attitude regarding the object. When the person likes the other but holds opposing sentiments toward the
object, or dislikes the other but shares similar sentiments toward the object, the triad is imbalanced. Like other theories of cognitive consistency (e.g., Festinger, 1957; Higgins, 1987), balance theory suggests that imbalance (i.e., inconsistency) among the elements is uncomfortable and motivates perceivers to restore balance. Balance is said to be restored once the weaker of the two sentiments is changed: either to (dis)like the other whom the person (dis)agrees with, or to (dis)agree with the other initially (dis)liked by the person (Heider, 1958).

Early empirical tests of balance theory examined responses to hypothetical social situations representative of each possible combination of a balanced or imbalanced triad (e.g., Cacioppo & Petty, 1981; Cartwright & Harary, 1956; Insko, Songer, & McGarvey, 1974; Jordan, 1953; Newcomb, 1956). These tests supported the balance principle, and also identified two related, but orthogonal, principles: attraction and agreement (see Zajonc, 1968). Later research extending these principles examined responses to a triad in which one of the three elements was missing and people were tasked with completing the missing sentiment; specifically, when the other was unknown (i.e., bogus stranger paradigm; Byrne, 1961). In the paradigm, the person’s own attitude and the stranger’s attitude toward the object are known, and the person must report their liking of the unknown other. Consistent with Heider’s balance theory (1958), a well-replicated effect within the paradigm has found attitude similarity leading to feelings of attraction toward the stranger (Byrne, 1961; see Byrne, 1971, and Montoya & Horton, 2013, for reviews).
Strength-related Properties of Attitudes

Although the effect of attitude similarity on attraction has been robustly demonstrated, advances in attitude theory has found not all attitudes to be equally predictive of behavior (e.g., Fabrigar, MacDonald, & Wegener, 2005; Petty & Krosnick, 1995). A wide body of research has examined the attitudinal qualities that lead attitudes to differentially impact behavior. For instance, direct experience with the attitude object prompts attitudes to be used to a greater extent in guiding behavior, compared to attitudes toward an indirectly encountered object (Regan & Fazio, 1977; Fazio & Zanna, 1978). Broadly construed, “strong” attitudes tend to be more predictive of behavior than their weaker counterparts (see Petty & Krosnick, 1995). Beyond direct experience, strong attitudes are those that concern important attitude objects, are readily accessible in memory, involve high levels of elaboration and certainty, and low levels of ambivalence. Conversely, weak attitudes involve unimportant attitude objects, low accessibility, low levels of elaboration and certainty, and high levels of ambivalence. For example, consider a person who has thought a great deal about supporting local farmers, finds the issue very important, and is very confident in his or her positive belief. This person would be much more likely to patronize a restaurant advertising exclusively locally sourced food than a different person who also thinks supporting local farmers is a good thing, but has not thought much about it and doubts whether his or her generally positive attitude is the correct one to have.

Although the moderating role of strength-related attitudinal properties has been widely considered across many domains, it has largely been neglected in the study of
attitude similarity and attraction effects. However, some exceptions exist for two attitude qualities: issue importance, and attitude certainty.

**The Role of Issue Importance**

Early research in the attraction domain gave some attention to the role of issue importance (e.g., Byrne, 1961). Intuitively, it seems logical that an (un)shared attitude about an important attitude object should lead a person to (dis)like an unknown other to a greater extent than when the attitude concerns a relatively trivial issue. However, evidence for the role of issue importance has been weak and variable, with some research finding that it moderates the effect, and other research finding that regardless of issue importance, similar attitudes promote liking whereas dissimilar attitudes do not (Byrne, 1961; Byrne & Nelson, 1964; 1965). The inconsistent nature of the effect has suggested it may only emerge in specific contexts, such as when (dis)agreement with a stranger on both important and unimportant issues is juxtaposed, allowing issue importance to become salient (Byrne, London, & Griffitt, 1968). Further research is needed to clarify the nature of an importance manipulation in an attraction setting (for example, whether important attitudes are typically more value-based relative to unimportant attitudes), as well as to consider importance in conjunction with other strength-related attitudinal properties.

**The Role of Certainty**

More recent research examined whether attitudes held with confidence (rather than doubt) differentially impact liking toward a target whose attitude is known (Sawicki & Wegener, 2015). Consistent with an attitude strength perspective, uncertain attitudes were not predictive of liking for a target, whereas certain attitudes did predict target
liking. However, in other studies in the same package, the pattern reversed – now, uncertain attitudes were more predictive of attraction to a target than certain attitudes, an effect which may be consistent with the proposed social validation mediator of attitude similarity and attraction (Byrne, 1971; Byrne, Clore, & Smeaton, 1986). What might lead certain attitudes to predict one pattern of results, as well as uncertain attitudes predicting its reverse?

*The role of certainty: Attitude strength*

An attitude strength account would predict the initial results found by Sawicki and Wegener. If attitudes held with confidence are strong, and thus more predictive of behavior than their doubtful, weak counterparts, it makes sense that the stronger attitude would be more predictive of attraction than the weaker attitude. Evidence for this pattern is found consistently across multiple studies, both when confidence is measured as well as manipulated (Sawicki & Wegener, 2015, Studies 1-2). Beyond a simple strength account, the meta-cognitive model of attitudes (MCM; Petty, Briñol, & DeMarree, 2007) could predict this pattern as well. The MCM suggests that attitudes are stored in memory alongside a validity tag, a marker to the attitude holder of the correctness and truth corresponding to the evaluation. When thinking about the evaluation, the validity tag also surfaces, causing certainty of the attitude to be present when attitude use is being considered. If a person shares an attitude with the target but is uncertain, the doubt associated with the attitude would be present at the time of judging the target and thus less likely to be used than a highly certain attitude.

The MCM may also account for why certainty, but not issue importance, shows replicable moderation of the attitude similarity effect on attraction. If certainty is tied to a
greater extent to the attitude than importance and is more likely to be present in mind when thinking about the attitude, it would suggest a more consistent moderation pattern. Of course, as stated earlier, the moderation pattern consistent with an attitude strength account was also reversed.

The role of certainty: Motivation to bolster

Though a strength perspective would account for uncertain attitudes being less predictive than certain attitudes for liking judgments, a social validation interpretation would be less harmonious with that pattern. According to a validation perspective, social consensus, or agreement from others, signals to the perceiver that his or her position is correct and accurate, whereas disagreement threatens the validity of the stance (Festinger, 1954). Further, the motive to seek social validation has been widely cited as the mechanism for the attitude similarity effect on attraction within the bogus stranger paradigm (Byrne, 1971; Byrne et al., 1986). This proposed mediator follows a social consensus approach, with people seeking reinforcement of their positions through attraction to another who shares the position (or repulsion towards another who threatens it). Research testing this motive varied the extent of verifiably correct attitudinal positions in addition to a stranger’s attitude similarity. When topics had an objectively correct attitudinal position, similarity effects on attraction declined relative to topics lacking a clear stance (Byrne, Nelson, & Reeves, 1966). Though the social validation perspective did not make predictions regarding attitude certainty, it would seem strange that those who are already highly certain of their attitudes would exhibit this reinforcement behavior, whereas those who doubt their stance do not (i.e., the strength pattern). Certainty indicates surety of correctness (Gross, Holtz, & Miller, 1995); thus, it
makes sense that those most in need of validation might be those most motivated to seek consensus.

Indeed, Sawicki and Wegener (2015; Studies 3-6) found evidence for this validation-based perspective. Rather than uncertain attitudes serving as weaker predictors than confident attitudes for attraction, uncertain attitudes now enhanced the desire for agreement from another. This pattern of effects is consistent with prior research from Sawicki and colleagues (Sawicki et al., 2011) in the domain of selective exposure to information where people were asked to choose issue-relevant articles to read after reporting their attitude favorability and attitude certainty toward the issue. In this paradigm, those who lacked confidence in their attitude toward the issue chose proattitudinal information significantly more than those who did not hold their attitudes with doubt. When a person was confident in their attitude, the attitude-consistent information bias disappeared. This pattern is indicative of attitudinal bolstering, or information seeking in a manner that reinforces the attitude. Returning to an attraction setting, the direction of the selective exposure effect is consistent with the results reported by Sawicki and Wegener (2015). A person uncertain of his or her attitude used this attitude to a greater extent when forming a liking judgment of a (dis)agreeing target relative to a person possessing a confident attitude.

When not explicitly directed to focus on attitudinal implications and simply asked to judge a target whose attitude is known, a strong attitude is more likely to impact the liking judgment than a weak attitude, thus producing the strength pattern in this context. In an attraction setting, the directive is to judge a target. As such, the attitude may affect the judgment (particularly if the attitude is strong), but the focus is on the judgment,
rather than on the attitude. The selective exposure paradigm, on the other hand, naturally focuses people on the attitude toward the issue at hand, as they make information choices relevant to that attitude. Sawicki and Wegener (2015) used this idea of *evaluative focus* to direct attention to the attitude in an attraction setting. Consistent with predictions, the bolstering pattern only emerged in the balance-based attraction paradigm when attitude holders were focused on their attitudes.

Specifically, attitude holders were told prior to making liking judgments to consider the implications of the target’s view for their own. This focus might entail consideration of the qualities of one’s attitude, perhaps particularly any qualities that are made salient in the setting. In the context of the previous discussion on the MCM, perhaps one’s level of confidence or doubt might be high on the list of attitude qualities that would come spontaneously to mind when considering one’s attitude. In this vein, focusing attitude holders on their attitudes makes salient the potential for a proattitudinal target to serve as a source of social validation and enable the doubtful attitude holder to bolster his or her uncertain attitude. When an attitude is held with confidence rather than doubt, however, social consensus is less desirable (or at least, less needed) as the attitude holder already believes the attitude to be valid and correct. In a selective exposure paradigm, uncertain attitudes led to attitude-consistent information preference whereas certain attitudes w to more even-handed information choices (i.e., both proattitudinal and counterattitudinal exposure). Similarly, a balance-based attraction paradigm involving salience of (un)certain attitudes motivates uncertain attitude holders to bolster their attitudes, and confident attitude holders to be drawn less discriminately to both a proattitudinal and a counterattitudinal target. The idea of manipulating evaluative focus in
an attraction paradigm will be revisited later. For now, attention will be shifted to another strength-related attitude property potentially capable of producing a similar pattern as certainty: attitudinal ambivalence.

The Case for Ambivalence

Like uncertainty, ambivalence is an attitude quality that while structurally weak, can also create motives capable of increasing the use of that attitude in some settings. Ambivalence refers to an attitude consisting of both positive and negative thoughts and feelings (reactions), leading to an overall mixed or conflicted evaluation. A distinction has been made in the literature between what some call “objective” ambivalence (Priester & Petty, 1996; see also Breckler, 1994; Cacioppo & Berntson, 1994; Hass, Katz, Bailey, & Eisenstadt, 1992; Kaplan, 1972; Newby-Clark, McGregor, & Zanna, 2002; Thompson, Zanna, & Griffin, 1995) and “subjective” ambivalence (Priester & Petty, 1996; see also Newby-Clark et al., 2002; Priester & Petty, 2001; van Harreveld, van der Pligt, & de Liver, 2009). Objective ambivalence refers to the assessment of the number of positive and negative reactions comprising the attitude, whereas subjective ambivalence considers the conflict experienced as a result of possessing a mixed attitude. The present research is concerned exclusively with the latter; however, in reviewing prior literature, it will be noted whether the studies involved objective or subjective ambivalence.

1 Other terms have been used to make the distinction between the different indicators of ambivalence (e.g., “potential” and “felt” ambivalence). For the purpose of this paper, the terms objective and subjective ambivalence will be retained.
**Antecedents of Ambivalence**

Ambivalence arises when one is aware of both positive and negative qualities of an attitude object. For example, returning to the fictitious restaurant described earlier that buys and serves only locally sourced food, a potential patron may feel positively about supporting local farmers and the freshness of the ingredients, but negatively about the relatively high prices and limited selection. When a person experiences only positive or negative reactions rather than some combination of both, the attitude is said to be univalent. Recalling strength-based properties of attitudes, univalent attitudes are considered stronger than ambivalent attitudes: they are more predictive of behavior, more persistent over time, and less resistant to counterattack (e.g., Thompson et al., 1995).

Importantly, ambivalent attitudes can be distinct from neutral attitudes, which can be either ambivalent or indifferent. As such, it can be difficult to distinguish an indifferent from an ambivalent attitude, as they may appear identical when reported on a bipolar evaluative scale of attitude favorability. Selection of the midpoint on such a scale could indicate a response that the attitude object is “*neither* positive nor negative,” suggesting indifference, or “*equally* positive and negative,” suggesting ambivalence (Thompson et al., 1995). Further, selection of any valenced response on an attitude scale does not preclude the presence of ambivalence; rather, it may suggest a dominant reaction tinged with conflicting reactions. The presence of a dominant reaction is indicative of ambivalence, which can exist in varying degrees for attitudes that are positive or negative, rather than neutral. To identify the presence of objective ambivalence, Kaplan (1972) introduced a measure separately assessing the positive and negative reactions.
Of course, we know that people desire consistency, and it is the inconsistency resulting from conflicting reactions that promotes the psychological discomfort associated with subjective ambivalence. The extent to which an attitude holder experiences subjective ambivalence is assessed uniquely from the separate existence of positive and negative reactions by asking attitude holders to report feeling conflicted, mixed, and indecisive (Priester & Petty, 1996) or emotionally torn (Newby-Clark et al., 2002) about the attitude object. Subjective ambivalence measures tap into secondary, metacognitive judgments about the attitude similar to other attitude strength measures such as attitude certainty (Gross et al., 1995; Thompson et al., 1995). Ambivalence is most uncomfortable when both the positive and negative components of the attitude are accessible in memory (Newby-Clark et al., 2002), as well as when action toward the ambivalent attitude object is required (van Harreveld et al., 2009b). Further, the discomfort associated with ambivalence is most pronounced for individuals high in preference for consistency (Newby-Clark et al., 2002; Cialdini, Trost, & Newsom, 1995).

The inconsistencies that lead to ambivalence can arise from a number of different sources. First, ambivalence often stems from internal sources. Conflicting cognitions or conflicting affective responses can lead to objective intracomponent ambivalence (Maio, Esses, & Bell, 2000). When cognitions and affective responses conflict, objectively assessed intercomponent, or affective-cognitive, ambivalence arises (Lavine, Thomsen, Zanna, & Borgida, 1998; Maio et al., 2000). Even when cognitions and/or affect do not presently conflict, anticipating unfamiliar counterattitudinal information can lead a person to feel subjectively ambivalent about their univalent attitude (Priester, Petty, & Park, 2007). Further, pre-existing internal ambivalence can be amplified by the situation.
When one is already ambivalent toward an attitude object but a decision regarding the object must be made, commitment to the choice can enhance ambivalence-induced discomfort (van Harreveld, Rutjens, Rotteveel, Nordgren, & van der Pligt, 2009). Conflict capable of producing ambivalence need not be exclusively intrapsychic, however. When attitudes are discrepant from those of liked others, people report greater subjective ambivalence about their attitudes than when their attitudes are shared (Priester & Petty, 2001).

**Consequences of Ambivalence**

Experiencing conflict-induced discomfort is unpleasant, and thus ambivalent attitude holders typically seek to reduce their ambivalence. The model of ambivalence-induced discomfort (MAID; van Harreveld et al., 2009b) suggests that ambivalence is most aversive when a choice has to be made as a result of the uncertainty associated with the outcome. In these situations people can engage in emotion-focused coping, or problem-focused coping. Emotion-focused coping includes procrastination (e.g., Luce, Bettman, & Payne, 1997; see Steel, 2007, for a review) or denial of personal responsibility (e.g., Zeelenberg, van Dijk, & Manstead, 1998) to reduce anticipated regret. When these options are not available, systematic predecisional processing may be an effective problem-focused coping strategy (Jonas, Diehl, & Brömer, 1997; Maio, Bell, & Esses, 1996). Consistent with the previously discussed notion of attitudinal bolstering in the context of doubt, this processing may be biased in order to serve a goal of reducing

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2 It should be noted that ambivalence need not always be experienced negatively. For example, Maio and Haddock (2004) suggest that ambivalent attitudes can actually be perceived as desirable when the attitude object is controversial. In these instances, an ambivalent attitude may appear fair and well-informed.
ambivalence (Clark, Wegener, & Fabrigar, 2008; Nordgren, van Harreveld, & van der Pligt, 2006; see Conner & Sparks, 2002, for an alternate position). When might ambivalence operate like uncertainty, and motivate one to bolster the attitude?

**Ambivalence, Uncertainty, and Attraction**

Like uncertain attitudes, ambivalent attitudes are structurally weak (Conner & Sparks, 2002; Thompson et al., 1995). They are less predictive of behavior and less stable (Armitage & Conner, 2000), more susceptible to persuasive messages (Bassili, 1996), and less accessible (Bargh, Chaiken, Govender, & Pratto, 1992) than their univalent counterparts. Also like uncertain attitudes, however, ambivalent attitudes can contain motives that lead to greater use in certain settings, as ambivalent attitude holders seek to reduce their ambivalence (see van Harreveld et al, 2009b). This paradoxical nature of ambivalent attitudes leads ambivalent attitude holders to exhibit greater argument quality sensitivity and increased systematic processing of information (Maio et al., 1996), though at times this processing can be motivationally biased toward attitude-consistent information (Clark et al., 2008; Nordgren et al., 2006). The selective processing may be due to perceptions of pro-attitudinal information as more likely to be beneficial in reducing ambivalence, and can lead to a subsequent reduction of experienced ambivalence (Clark et al., 2008; Nordgren et al., 2006).

Recall that within a selective exposure paradigm, attitude certainty yielded an attitude strength pattern on information choice when familiarity with available information was high, but an attitude bolstering pattern when familiarity with available information was low (Sawicki et al., 2011). Sawicki and colleagues replicated both the strength pattern and its bolstering reversal when knowledge was used as an index of
familiarity and subjective ambivalence was the strength-related property of the attitude (Sawicki et al., 2013). Relevant research in the information processing domain found subjectively ambivalent attitude holders to process novel proattitudinal information more deeply (and counterattitudinal information less deeply) than univalent attitude holders (Clark et al., 2008). Both Sawicki et al. (2013) and Clark et al. (2008) found the motive underlying their respective results to be the perception that proattitudinal information is more likely to decrease ambivalence, whereas counterattitudinal information is more likely to increase ambivalence.

Despite similar strength and bolstering patterns observed for doubt and ambivalence within a selective exposure domain, research has not yet examined if ambivalence operates similarly to doubt in an attraction setting. Overall, ambivalent attitudes have not received much attention in the attitude similarity and attraction domain. Priester and Petty (2001) found that people report feeling more subjectively ambivalent about their attitudes when their attitudes are not shared by others; however, the others were known and/or already positively regarded (e.g., family members, in-group exemplars). Further, as previously discussed, this research provides evidence of

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3 One might wonder if doubt and ambivalence are simply similar routes to discomfort. Although the present research presents the argument that doubt and ambivalence may lead to similar outcomes, there is reason to think that they are unique strength-related properties of attitudes. For example, the effect of ambivalence in Sawicki et al. (2013) remained significant when controlling for certainty, though certainty was not significant when controlling for ambivalence. Further, research on amplification and certainty (i.e., increasing certainty does not invariably strengthen an attitude, but rather amplifies the dominant effect of the attitude) found that increasing certainty strengthens attitudes only when the attitude is univalent; when the attitude is ambivalent, increasing certainty weakens the attitude, suggesting that certainty amplified the influence of ambivalence (Clarkson, Tormala, & Rucker, 2008). Taken together, the research indicates that certainty and ambivalence are distinct constructs.
interpersonal attitudinal discrepancy as an antecedent of ambivalence, rather than a study of attraction. Ullrich and Krueger (2010) found that ambivalent people preferred ambivalent others, though relative to indifferent (rather than univalent) others; further, only objective, not subjective, ambivalence was considered.

It is plausible that attraction to another person can relate to goals to decrease ambivalence. A proattitudinal other may provide reinforcement of the dominant attitude and enable minimization, or elimination, of conflicting reactions. In contrast, a counterattitudinal other may be threatening to an ambivalent attitude holder seeking to reduce his or her ambivalence if they validate the conflicting reactions, but not the overall attitude. Additionally, a proattitudinal other may be a source of information yet unknown to the ambivalent attitude holder which can aid in the reduction, whereas a counterattitudinal other can increase ambivalence by providing even more conflicting information. Of course, the aforementioned scenarios concern a univalent target. Target ambivalence may have an impact as well, if the ambivalent nature of the target might serve as a source of similarity for an ambivalent attitude holder. This poses interesting questions about whether similarity might get in the way of the person helping to reduce ambivalence, however. The notion of target ambivalence is not entirely unlike prior research by Ullrich and Krueger (2010), though they did not really allow for an examination of attitude similarity in terms of (mis)matching valence across participants, as all participants held neutral attitudes. The present research represents an initial step in considering the role of ambivalence in the attitude similarity and attraction link.
Overview of the Present Research

In this thesis, I extend the study of strength-related properties of attitudes moderating the link between attitude similarity and attraction to attitudinal ambivalence, a previously unstudied property in this domain. As has been reviewed, prior research in this tradition has found weak, inconsistent evidence for the role of issue importance (Byrne, 1961; Byrne & Nelson, 1964; 1965) and strong evidence for the role of attitude certainty (Sawicki & Wegener, 2015). Attitudes held with confidence are used as a guide in attraction judgments whereas attitudes held with doubt are not, when the task of judging the target is in mind (i.e., an attitude strength pattern). When the focus is instead shifted to the perceiver’s attitude, the effect reverses. Now, uncertain attitudes predict (dis)liking judgments of a (dis)agreeing target to a greater extent than certain attitudes (i.e., a bolstering pattern). The motive to reduce ambivalence is not unlike the motive to reduce doubt and provides reason to believe ambivalence may also behave like uncertainty in an attraction setting. A most notable demonstration of the similarly operating motive found consistent bolstering patterns for each of these two properties separately while controlling for the other in an information seeking context (Sawicki et al., 2011; Sawicki et al., 2013). The question I aim to answer with this research is whether ambivalence can function in a similar manner to doubt in an attraction setting, and if so, under which conditions can each pattern be expected to emerge.

Across two studies, I examined if and when ambivalent attitudes are used differently than univalent attitudes when making a liking judgment of a target other. The basic experimental design was adapted from procedures used in the certainty modification of a balance-based attraction paradigm (Sawicki & Wegener, 2015; see also
Byrne, 1961; Jordan, 1953). Unlike the traditional bogus stranger paradigm where numerous attitudes purportedly those of the same target are provided, only one attitude per target is provided in the present research. More specifically, people reported their attitudes and properties of these attitudes toward an issue before being asked to make a liking judgment of the target other whose attitude is known. An essentially novel issue was used in both studies to minimize any effect of pre-existing attitudes. In Study 1, no new information about the issue is provided, so the paradigm parallels that used by Sawicki and Wegener (2015) very directly. In Study 2, some (potentially new) information about the issue is provided so the person can possibly serve a goal of reducing ambivalence. Measured attitudes and ambivalence were used to predict reported liking in both studies.

I predicted that default conditions (i.e., with no instruction to focus on their attitudes) would lead people low in ambivalence to use their attitudes as a guide in making liking judgments of a target. In this setting, people high in ambivalence may be relatively unlikely to use of their attitudes as input to the liking judgment. When focused on their attitudes, however, I expected this pattern to reverse. In this context, highly ambivalent attitude holders seeking to bolster their attitude might do so through attraction (or lack thereof) to a proattitudinal (or counterattitudinal) target, and univalent attitude holders lacking a motive to bolster ought to use their attitudes less in guiding liking judgments of the target. Specifically, Study 1 adapted the evaluative focus manipulation used by Sawicki and Wegener (2015) that directed those in an attitude-focused condition to consider the implications of the target’s attitude for their own when making liking judgments. In line with research suggesting that having to make some sort of decision
regarding the ambivalent attitude increases discomfort (e.g., van Harreveld et al., 2009a), Study 2 attempted to induce the goal of coming to a univalent attitude for those in the attitude-focused condition. Further, the roles of target ambivalence (Study 1) and knowledge the perceiver has about the issue (Study 2) were considered. Overall, I predicted that when ambivalence was not salient and/or no motive to reduce ambivalence was present, an attitude strength pattern would emerge. When the target is seen through the lens of a potential source of ambivalence reduction (when proattitudinal) or amplification (when counterattitudinal), a bolstering pattern should emerge. However, this may be contingent on whether the target is seen as capable of reducing the ambivalent attitude holder’s ambivalence because of the target’s own ambivalence (see Study 1) or the target’s ability to provide information that would be novel to the attitude holder (see Study 2).
Chapter 2: Study 1

The goal of the first study was to test whether ambivalence can moderate the predictive value of attitudes on attraction. Consistent with prior research findings where measured attitude confidence increases use of attitudes, this first study aimed to serve as an initial demonstration of a similar pattern for univalent (i.e., strong) versus ambivalent (i.e., weak) attitudes. In this study, both attitude favorability and subjective attitudinal ambivalence toward an issue were measured as predictors of liking for a pro-issue target. It was predicted that participants who are univalent in their attitudes toward the issue would consistently (dis)like the target who (dis)agreed with them, thus resulting in univalent attitudes strongly predicting liking. On the other hand, participants who are ambivalent in their attitudes toward the issue should be less inclined to use these weaker attitudes as input for evaluating a target, regardless of whether the target was proattitudinal or counterattitudinal.

Just as doubtful and ambivalent attitudes are structurally weak relative to their stronger counterparts (confident and univalent, respectively), they are also both capable of creating motives that increase use of the attitude insofar as they induce holders to reduce the discomfort associated with the attitude. Specifically, directing participants’ attention the implications of the target’s attitude might reverse the strength pattern, leading ambivalence to amplify the effect of the attitude on liking for the target. In the current research, I manipulated evaluative focus by asking participants to read either attitude focus instructions or non-attitude focus (i.e., target focus) instructions before
liking judgments were made. I predicted that participants focused on the target rather than on their attitude would exhibit an attitude strength pattern, with univalent attitudes predictive of attraction and ambivalent attitudes not. Those focused on their attitudes, however, should show a reversal, consistent with an attitude bolstering account.

Study 1 also addresses how the nature of the target’s attitude may impact judgments of liking. In past research (e.g., Byrne, 1961; Sawicki & Wegener, 2015) the attitude strength of the stranger has not been manipulated; it seems reasonable to presume that without this information, the attitude is generally inferred to be strong. However, just as the perceiver’s attitude may be ambivalent (or uncertain, or unimportant, etc.), so may the target’s (see Ullrich & Krueger, 2010), and it is of interest how this information may affect target perceptions. In the current study, we manipulated the target (who was always pro-issue) to be either highly ambivalent or not at all ambivalent about the issue. As Study 1 provides an initial test of the role of target ambivalence, no specific predictions were made. Instead, I considered three competing hypotheses: (i) ambivalent (univalent) participants might prefer ambivalent (univalent) targets in a double-similarity matching pattern; (ii) ambivalent participants might prefer a univalent target, if the target is seen as a source of ambivalence reduction; or (iii) there might be no effect of target ambivalence on liking for the target.

**Method**

**Participants and design.** Two hundred three participants (90 males; mean age = 38) were recruited online via Amazon’s Mechanical Turk and received compensation for their time. Favorability and ambivalence of attitudes toward junk food taxation were
measured and evaluative focus and target’s ambivalence were manipulated between subjects to predict liking.

**Procedure.** After giving their consent to participate in this study, participants completed the study materials at a computer of their choosing using the Internet software Qualtrics (Qualtrics, 2015). The study was presented as a survey of general impressions toward an assortment of social issues, as well as general tendencies and personal preferences. Participants were told first that they would be asked questions about their attitudes toward a variety of issues, and later told they would be asked to report liking for purported former study participants after learning their attitudes toward some of the issues participants had just evaluated. Participants first expressed their attitude about various issues, including the target issue of junk food taxation. The target issue was embedded within a broader survey that addressed different strength-related features for different topics. This was done in order to avoid drawing attention to either the attitude or the ambivalence per se, so participants would spontaneously bring to mind the relevant attitude when faced with the liking questions. Therefore, participants reported either confidence, ambivalence, or knowledge relating to each of the attitudes. For the target issue, ambivalence was reported. Lastly, participants received either attitude or target focus instructions before indicating liking for a person who supports taxing junk food and is either ambivalent or univalent in their attitude.

**Independent Variables**

*Attitude favorability.* Before the attraction measure, participants reported attitudes toward ten issues presented at random, including the target issue of junk food taxation. The attitude measures varied depending on issue. For the target issue of junk food
taxation, attitudes were reported using three 9-point scales (1 = bad, harmful, unfavorable; 9 = good, beneficial, favorable). Scores were highly correlated ($\alpha = .93$) and were averaged to form an index of attitude favorability ($M = 5.34$, $SD = 2.47$). The other nine issues served as filler to avoid suspicion about the purpose of the study and were not included in analyses.

**Attitudinal ambivalence.** Participants completed measures of subjective ambivalence developed by Priester and Petty (1996) toward junk food taxation. Subjective ambivalence was measured using three 11-point scales measuring the extent of conflicted feelings, indecision, and mixed reactions ($1 = \text{feel no conflict at all, feel no indecision at all, completely one-sided reactions; 11 = feel maximum conflict, feel maximum indecision, completely mixed reactions}$). Scores were highly correlated ($\alpha = .92$) and were averaged to form an index of attitudinal ambivalence ($M = 5.01$, $SD = 2.98$).

**Evaluative focus.** After reporting their attitudes and properties of the attitudes toward the ten issues, participants were instructed that they would next see the attitudes reported by ostensible former participants in the study on several of the issues evaluated previously. All participants were told that upon learning the attitudes of the former participants, they would be asked how they feel about each person. For those in the target focus condition, this was the extent of the instructions. For those in the attitude focus condition, they saw an additional statement instructing them to think about what the other person’s views on the social issue at hand meant for their own views on the issue when deciding how you feel about each person. All participants next saw the responses of four fictitious former participants (i.e., Chris, Loren, Pat, and Sydney). The third of these
(“Pat”) served as the target other who reported a highly favorable attitude toward junk food taxation (see Figure 1, top panel). For participants in the attitude focus condition, they received a prompt immediately before evaluating Pat reminding them that when deciding how they feel about each person to consider the implications of the person’s views for their own. Those in the target focus condition saw no such prompt.

**Target ambivalence.** In addition to seeing Pat’s favorable attitude toward junk food taxation, participants were also shown Pat’s responses on two of three items from the same subjective ambivalence measure they had completed earlier in the study (see Figure 1, bottom panel). For participants in the ambivalent target condition, the responses on the scales indicated high ambivalence. For participants in the univalent target condition, the responses on the scales indicated virtually no ambivalence.

**Dependent Measures**

**Attraction.** Before making attraction judgments toward a person, participants were informed that in previous iterations of this study, participants reported their attitudes and properties of these attitudes toward a variety of social issues. They were then told that the task they would complete involved seeing responses of former participants before providing their feelings about each person. Participants responded to four 5-point scales designed to measure liking of the target (i.e., How much do you like Pat? How much would you like discussing a junk food tax with Pat? How much would you enjoy meeting Pat at a social event? How much would you like to read Pat’s essay on taxing junk food?; 1 = not at all; 5 = very much). Scores were fairly highly correlated (α = .87) and were averaged to form an index of liking (M = 3.35, SD = .99).
**Evaluation:**

**Taxing junk food is...**

<table>
<thead>
<tr>
<th>Bad</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Bad]</td>
<td>![Good]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harmful</th>
<th>Beneficial</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Harmful]</td>
<td>![Beneficial]</td>
</tr>
</tbody>
</table>

**Ambivalence:**

**How mixed are your thoughts and feelings about taxing junk food?**

<table>
<thead>
<tr>
<th>I feel completely one-sided reactions</th>
<th>I feel completely mixed reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>![I feel completely one-sided reactions]</td>
<td>![I feel completely mixed reactions]</td>
</tr>
</tbody>
</table>

**How conflicted are your thoughts about taxing junk food?**

<table>
<thead>
<tr>
<th>I feel no conflict at all</th>
<th>I feel maximum conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>![I feel no conflict at all]</td>
<td>![I feel maximum conflict]</td>
</tr>
</tbody>
</table>

**Figure 1.** Target Attitude Favorability and Ambivalence Reports used in Study 1. 
*Note.* Participants in the ambivalent target condition saw the above ambivalence responses. Participants in the univalent target condition saw the same scale items, but responses of little to no ambivalence (i.e., responses of 1 and 2 on the above 11-point scales).
Results

Centered regression analyses were conducted on the liking index with attitude favorability, attitudinal ambivalence, evaluative focus condition, target ambivalence condition, and all possible interactions entered as predictors (see Table 1). As expected, the main effect of Attitude was significant, $b = .17, t(187) = 5.96, p < .001$. This replicates the robust attitude similarity effect on attraction, with pro-junk food tax participants liking the pro-junk food tax target more than anti-junk food tax participants. Of greater interest, the Attitude X Attitudinal Ambivalence interaction was significant, $b = -.03, t(187) = -3.23, p = .002$ (see Figure 2). When participants did not feel ambivalent in their attitude toward taxing junk food (one SD below the ambivalence mean for junk food taxation), these univalent attitudes strongly predicted liking of the target, $b = .25, t(187) = 9.42, p < .0001$. Participants who held their attitudes with ambivalence (one SD above the ambivalence mean for junk food taxation), however, used these attitudes less in determining their liking for the target, $b = .09, t(187) = 1.85, p = .07$. Thus, for people who felt conflicted or undecided about their view towards the issue of taxing junk food, they were less likely to use these weaker attitudes in determining liking for a (dis)agreeing other as compared to people feeling much less ambivalent about their junk food taxation attitude.

No other effects were significant, though a marginal main effect of Evaluative Focus emerged, suggesting that those in the Attitude Focus condition liked the target slightly more than those in the Target Focus condition, $b = .11, t(187) = 1.86, p = .065$. No higher order interactions beyond the previously discussed interaction of Attitude by Ambivalence were significant, including the Attitude X Ambivalence X Evaluative Focus
interaction, $b = -.002, t(187) = -.23, p = .82$. Thus, both the Evaluative Focus and Target Ambivalence manipulations failed to produce significant changes to the overall Attitude X Ambivalence interaction.
Table 1.
*Full Regression Model Predicting Target Liking in Study 1.*

<table>
<thead>
<tr>
<th>Predictor</th>
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<th>t</th>
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<td>.02</td>
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<td>Evaluative Focus (EF)</td>
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<td>Target Ambivalence (TA)</td>
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<td>-3.23</td>
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<td>.06</td>
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<td>.01</td>
<td>-1.39</td>
<td>.17</td>
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</tbody>
</table>

*Note.* Evaluative Focus was contrast coded (target focus = -1, attitude focus = 1), as was Target Ambivalence (low ambivalence = -1, high ambivalence = 1). Attitude and Ambivalence were mean-centered prior to entry in the model.

Figure 2. *Interaction of Attitude and Ambivalence in Study 1.*
Discussion

Study 1 was an initial demonstration of the moderating effect of attitudinal ambivalence on the attitude similarity-attraction link. Univalent attitudes (i.e., strong attitudes) significantly predicted liking of the target other in a pattern consistent with the attitude similarity effect; the target was liked considerably more when holding a proattitudinal position than when holding a counterattitudinal. However, ambivalent attitudes (i.e., weak attitudes) did not show the same slope. Ambivalent attitudes mattered less in serving as a source of liking of the target. This pattern is consistent with an attitude strength account, and is the first known research to show moderation of the attitude similarity effect on attraction by ambivalence.

Study 1 also served as the first study to consider the impact of evaluative focus on the effect of ambivalent attitudes. In this early test, the manipulation did not appear to moderate the strength pattern observed. Although a significant effect of evaluative focus was anticipated, there are several reasons to consider why the manipulation did not produce effects in this context. First, though the specific evaluative focus manipulation has produced results in prior research (Sawicki & Wegener, 2015), it may be sample-specific. Notably, the previous influence of this manipulation took place with an in-lab student population; similar results have not been replicated in an online national sample. A second consideration is the potential impact of the other attitude objects and their corresponding attitude strength measures. These were included as distractions from the target issue and measures, but it is possible they were too distracting and diluted elaboration on the target issue. Further, asking about other attitude strength properties (e.g., knowledge, certainty) for other issues in the study raises the possibility that
participants in the attitude focus condition were in fact compliant in focusing on the implications of the person’s attitude for their own, but other properties of their attitude toward the target issue may have been salient, rather than ambivalence.

Study 1 further expanded on prior research in examining the effect of not only the ambivalence of the perceiver, but the ambivalence of the target other as well. The target ambivalence manipulation did not influence liking judgments. The non-effect of target ambivalence could potentially lend further support to a lack of salience of one’s own ambivalence, as discussed above. Another possibility relates to perceptions of the target’s ambivalence. It may have been difficult for a person to understand how a person was quite favorable, but also highly ambivalent (in the ambivalent target condition). If these two concepts are thought of as orthogonal to the perceiver, the mismatch may have led to confusion or discounting of the ambivalence information. In addition, it is unclear whether people looked past the attitude items that conveyed the target person’s position. There was no manipulation check on perceptions of target ambivalence, so one cannot be sure people correctly noted the target person’s level of ambivalence. It is possible in an alternative context target ambivalence could hold differential effects (for example, perceiving one’s own ambivalent attitude as “correct” and/or irresolvable could prompt attraction toward a proattitudinal, ambivalent other). The present results, however, do not speak to any effect of the ambivalence (or lack thereof) of the target’s attitude.
Chapter 3: Study 2

Study 2 was designed to correct some of the potential flaws of Study 1 with a cleaner, simpler design intended to create a context where a bolstering pattern may be most likely to be detected. In Study 2, only the single issue of interest (junk food taxation) was presented, rather than obscuring it amongst numerous other issues and irrelevant measures of attitude properties. Similarly, only a single target was provided, rather than appearing between other non-target liking judgments. Unlike Study 1, knowledge about the issue was measured to help determine whether any felt ambivalence was resolvable. Recall from the selective exposure research (Sawicki et al., 2013; see also Sawicki et al., 2011) that ambivalent attitude holders selected proattitudinal information only when their prior knowledge was low, as novel attitude-consistent information was perceived as likely to help them reduce their ambivalence. When prior knowledge was high, however, univalent attitudes rather than ambivalent attitudes predicted proattitudinal information choices. In addition to measuring knowledge, more information was given about the target, who was not only known to be pro-issue, but also provided a moderately strong pro-issue message (that could be helpful in resolving ambivalence of people who agree with the person’s stance).

Providing more source-relevant information was done in part to be consistent with the cover story involved in a new evaluative focus manipulation. As the evaluative focus manipulation in Study 1 failed to work, a more goal-oriented focus manipulation was used in Study 2. It is possible that the evaluative focus manipulation from Study 1 may
have worked in the present study, as the present sample drew from the same student population where it has been used successfully in the past (see Sawicki & Wegener, 2015). However, it is possible that for ambivalence (rather than doubt), it is not an effective manipulation, regardless of population. Therefore, those in the attitude focus condition read a directive stating that the research team would like participants to come to a firm stance on the issue by the end of the study. This differed substantially from the previous manipulation of asking participants to consider the implications of the target’s attitude for their own. The attitude focus manipulation was altered in this fashion in order to heighten the motivation felt by participants to reduce their ambivalence. Because not all participants feel ambivalence toward the issue, the “firm stance” language was selected so as not to be exclusive. For participants who are univalent, they already have a firm stance on the issue and thus should not feel any motivation to change their attitude as they progress through the study. For ambivalent participants, however, the firm stance directive should motivate them to reduce their ambivalence and reach an unconflicted stance on the issue while proceeding through the study. Those in the no focus condition read no such instruction at the outset of the study. To lend credence to the manipulation, additional information on the issue (provided by the target) was presented before rating the target other, and before reporting post-message measures of attitude favorability and ambivalence toward the topic.

**Method**

**Participants and design.** One hundred forty-nine Ohio State University undergraduates (93 males; mean age = 19.5) enrolled in introductory psychology courses participated in the study in partial fulfillment of a course requirement. Favorability and
ambivalence of the attitude toward the topic were measured, as was knowledge about the topic. Evaluative focus, modified from Study 1, was manipulated between-subjects. Together, these variables were used to predict liking for a pro-topic target.

**Procedure.** After giving their consent to participate in this study, participants completed the study materials at a computer in the lab running Internet software Qualtrics (Qualtrics, 2015). Sessions consisted of one to eight participants completing the study at a given time. Once in the study, participants were given initial instructions, which varied between participants as a function of an evaluative focus manipulation. Participants next reported their attitude favorability, attitudinal ambivalence, and knowledge about the issue of junk food taxation. Immediately following, all participants read that the target person is a graduate student in Business and Economics at Stanford University who has recently completed a thesis on the funding of healthy food initiatives and fully supports the issue. After reading a moderately strong argument purportedly made by the target, participants reported their liking for the target. In addition, they reported how helpful the target was in reaching a firmer stance and how motivated they were to come to a more definitive stance before reporting their attitudes, ambivalence, and perceived knowledge regarding the issue once again.

**Independent Variables**

**Evaluative focus.** After consenting to participate in the study, participants read one of two instruction sets. For those in the attitude focus condition, they read a set of instructions that also functioned as a cover story. This passage stated that the purpose of the study regarded opinions on the implementation of a junk food tax currently under consideration by legislators to promote healthy eating and raise money that can be used
for various purposes. Participants were further told that because the proposal for the issue is quite recent, the research team acknowledges that most people are unfamiliar with the idea and thus aims to collect the initial opinions and feelings about a junk food tax before providing participants with some information on the topic so they can learn more about it. The instructions concluded with a statement telling participants that by the end of the survey, the research team would like them to have reached a firm, definitive stance on the issue, and to please keep this goal in mind as they proceed. Participants in the no focus condition read no such passage after providing consent; they were simply told that the survey would begin on the next screen where they would be asked to report their opinions and feelings in response to the questions asked.

**Attitude favorability.** Participants reported their attitude toward the single topic of junk food taxation. The measures used were identical to those of Study 1. As in Study 1, the three items were highly correlated ($\alpha = .85$) and were averaged to form an index of attitude favorability ($M = 5.67, SD = 1.95$).

**Attitudinal ambivalence.** After reporting their attitudes, participants completed the same subjective ambivalence measure as used in Study 1. Again, the three ambivalence items correlated well ($\alpha = .84$) and were averaged to form an index of attitudinal ambivalence ($M = 5.36, SD = 2.43$).

**Knowledge.** After completing both the favorability and ambivalence measures, participants reported perceived knowledge about the target issue using three 7-point scales. The items asked how much knowledge they think they have about the issue (1 = very little knowledge; 7 = a lot of knowledge), how well informed they are about the issue (1 = completely uninformed; 7 = completely informed), and to complete a statement...
asking them to think about what they know about the issue (1 = *I know essentially nothing about it*; 7 = *I know essentially everything about it*). Reliability analyses indicated that these items hung together very well (α = .92) and as such, were averaged to form an index of perceived knowledge (M = 2.70, SD = 1.39).

**Dependent Measures**

*Attraction.* After reading the message made by the target, participants responded to two attraction items on 7-point scales asking how much they like the target and to what extent they would like spending time talking with the target (1 = *not at all*; 7 = *very much*). The items were not incredibly well correlated (α = .60), though the relation was still significant (r = .43, p < .01). Therefore, they were still averaged to form an index of liking (M = 4.38, SD = .99).

*Helpfulness.* In addition to being asked how much they like the target, participants completed a single item measure of perceived helpfulness of the target. Specifically, participants reported how helpful the target-provided information was in developing a firmer stance on the issue (1 = *not at all*; 7 = *very much*). This item was highly correlated with the liking index (r = .46, p < .01) but as helpfulness is a theoretically distinct construct from liking, it was not included in the index.

*Motivation.* A final 7-point scale item was provided asking participants to report how motivated they felt to achieve the goal of developing a firmer stance on the issue (1 = *not at all*; 7 = *very much*). This item was intended to serve as a manipulation check that the goal induction (i.e., evaluative focus) was successful.
Results

First, an independent samples t-test confirmed that participants in the attitude focus condition felt sufficiently more motivated ($M = 4.92, SD = 1.37$) than participants in the no focus condition ($M = 4.45, SD = 1.50$), $t(147) = -2.01, p = .046$. A centered regression analysis that most closely approximated the Study 1 design was next conducted on the liking index with attitude favorability, attitudinal ambivalence, evaluative focus condition, and all possible interactions entered as predictors (see Table 2). As expected, there was a main effect of Attitude, $b = .15, t(141) = 3.03, p < .01$. However, the other two main effects (Ambivalence and Focus) were not significant ($ps .17 - .64$). No higher order interactions were significant, including the Attitude X Ambivalence two-way interaction, $b = -.02, t(141) = -1.11, p = .27$, or the qualifying three-way interaction with Focus (i.e., Attitude X Ambivalence X Focus), $b = -.01, t(141) = -.37, p = .71$. It appears therefore that despite the Focus manipulation leading to greater motivation for those focused on their attitudes to reach a firmer stance, the manipulation did not create differences between conditions in how attitudes were used and as such, was not included in the subsequent analysis.

Importantly, knowledge was also measured in this study as it may affect whether the target is seen as a source of potential ambivalence reduction. When a person is ambivalent but does not have a lot of knowledge informing the ambivalent attitude, a target other who (dis)agrees with the person may be seen as more (un)likely to be able to help resolve the ambivalence, because the probability of the target possessing knowledge unknown to the person is relatively high. When an ambivalent person already has a lot of knowledge about the attitude object, a target is less likely to be able to provide
information that the person does not already have. Thus, it is possible that an ambivalent person low in knowledge about the issue will like (dislike) a target more when the target shares (opposes) his or her attitude, relative to an ambivalent person already high in issue-relevant knowledge.

To test this, a second centered regression analysis was conducted on the liking index, with Attitude, Ambivalence, Knowledge and all possible interactions entered as predictors (see Table 3). In this model, the main effect of Attitude was again significant, \( b = .15, t(141) = 3.18, p < .01 \). In addition, the Attitude X Ambivalence X Knowledge three-way interaction was significant, \( b = -.03, t(141) = -2.55, p = .01 \). Probing this interaction using the PROCESS macro for SPSS (Hayes, 2013), the Attitude X Ambivalence interaction was significant when Knowledge was high (one SD above the knowledge mean), \( b = -.05, t(141) = -2.66, p < .001 \), but not when Knowledge was low (one SD below the knowledge mean), \( b = .03, t(141) = 1.18, p = .24 \). Though we would expect the interaction to be significant (in opposite directions) for both levels of Knowledge, the conditional effects of Attitude on liking at different values of both Ambivalence and Knowledge are consistent with predictions and more clearly demonstrate the nature of the effect.

When Knowledge was low, the effect of Attitude approached significance when Ambivalence was high (one SD above the ambivalence mean), \( b = .22, t(141) = 1.92, p = .057 \), but less so when Ambivalence was low (one SD below the ambivalence mean), \( b = .10, t(141) = 1.74, p = .08 \). This pattern was directionally consistent with an attitude bolstering pattern (see Figure 3, top panel). When Knowledge was high, however, Attitudes predicted liking when Ambivalence was low, \( b = .26, t(141) = 4.99, p < .0001 \),
but not when Ambivalence was high, $b = .001, t(141) = .004, p = .997$, consistent with an attitude strength pattern (see Figure 3, bottom panel). Nothing else in the model was significant, and the interaction of Attitude, Ambivalence, and Knowledge weakened, but remained significant even after controlling for Focus and all possible interaction terms, $b = -.02, t(136) = -2.07, p = .04$. 
Table 2.  
*Regression Model (with Focus) Predicting Target Liking in Study 2.*  

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$b$</th>
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*Note.* Evaluative Focus was contrast coded (*no focus* = -1, *attitude focus* = 1). Attitude and Ambivalence were mean-centered prior to entry in the model.

Table 3.  
*Regression Model (with Knowledge) Predicting Target Liking in Study 2.*  

<table>
<thead>
<tr>
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<td>-2.55</td>
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</table>

*Note.* Attitude Ambivalence, and Knowledge were mean-centered prior to entry in the model.
Figure 3. Interaction of Attitude, Ambivalence, and Knowledge on Liking in Study 2.
*Moderated Mediation Analysis*

Additionally, participants were asked in the study how helpful the information provided by the target was in helping them reach a firmer stance (i.e., Helpfulness). It makes theoretical sense that Helpfulness might mediate the effect between Attitude and liking, moderated by Ambivalence and Knowledge (i.e., moderated mediation; see Figure 4). Specifically, for a person who is low in knowledge and high in ambivalence, encountering a target who shares the person’s attitude should lead the person to see the target as helpful for resolving their own ambivalence, which should subsequently lead them to like the target.\(^4\) For this analysis, 10,000 bias-corrected bootstrapped confidence interval estimates were obtained (see Hayes, 2013).

First, the predicted main effect of Attitude on Helpfulness was significant, \(b = .18, t(141) = 3.17, p < .01\). There was also a main effect of Knowledge, indicating that those lower in knowledge generally saw the target as more helpful than those higher in knowledge, \(b = -.24, t(141) = -3.45, p < .001\). These main effects were qualified to an extent by the interaction of Attitude X Ambivalence X Knowledge on Helpfulness, \(b = -.03, t(141) = -1.84, p = .067\) (see Figure 5). Though the overall interaction was marginal, the simple slopes were directionally consistent with predictions. When Ambivalence was low (one SD below the ambivalence mean), the effect of Attitude on Helpfulness was significant regardless of amount of knowledge (\(ps < .01\)). When Ambivalence was high (one SD above the ambivalence mean), however, the effect of Attitude was conditioned

\(^4\) It may be of concern that a motive to reach a firmer stance might be theoretically distinct from a motive to reduce ambivalence. However, other data not reported in this manuscript found a strong relation between the Helpfulness item and a similarly phrased item concerning reduction of ambivalence, \(r_s = .82, p < .01\).
on amount of perceived knowledge. When people were low in Knowledge (one SD below the knowledge mean), the effect on Helpfulness was significant, \( b = .30, t(141) = 2.11, p = .04 \). For those high in both Knowledge and Ambivalence, however, the effect was not at all significant, \( b = < .01, t(141) = .0002, p > .99 \). The interaction of Attitude by Ambivalence contingent on amount of Knowledge was directionally observed as well. When Knowledge was low, Attitude X Ambivalence was not significant, \( b = .02, t(141) = .89, p = .38 \). When Knowledge was high, the interaction approached significance, \( b = -.05, t(141) = -1.88, p = .062 \).

Next, the conditional indirect effect of Attitude on Liking through Helpfulness was in part consistent with the predicted pattern. When Ambivalence was low, Helpfulness significantly mediated the relationship regardless of amount of Knowledge. This is somewhat surprising, as one might predict from a validation standpoint that those high in knowledge and low in ambivalence would not need to resolve any ambivalence and thus should not perceive the target as helpful. However, it may suggest that people who were not ambivalent prior to target presentation simply used the information to reinforce their existing attitude and inform their liking judgments of the target. Of greater interest, when Ambivalence was high, Knowledge did moderate this indirect effect of Attitude through liking. For those low in Knowledge (one SD below the knowledge mean), the mediation through Helpfulness was significant (\( b = .09; 95\% \text{ CI}: .01, .20 \)). For those high in both Knowledge and Ambivalence, the indirect effect was not significant (\( b < .001; 95\% \text{ CI}: -.08, .09 \)). This discrepancy is further suggestive of a bolstering pattern when knowledge is low, with ambivalent attitude holders seeking information that can help reduce their ambivalence and using this to inform their liking
judgments of the target. When knowledge is high, ambivalent attitude holders can be
helped less by the target and thus do not see the target as helpful. Though the overall
moderated mediation model does not reach conventional levels of significance ($b = -.01;
95% CI: -.02, .002), the pattern of the conditional indirect effect provides initial evidence
that ambivalent people are using their attitudes differently in making liking judgments of
a target who is relatively able or unable to help them reduce their ambivalence.

![Figure 4. Moderated Mediation Model in Study 2 (Model 12, PROCESS).](image-url)
Figure 5. Interaction of Attitude, Ambivalence, and Knowledge on Helpfulness in Study 2.
Discussion

Study 2 provides an early demonstration of a context that may be capable of producing both traditional attitude strength as well as attitudinal bolstering patterns. As seen in Study 1, ambivalent attitudes can be less predictive of liking compared to univalent targets, consistent with an attitude strength perspective. However, this relation is contingent on the amount of perceived knowledge regarding the attitude object. When attitude holders perceive relatively high knowledge, the strength pattern emerges; in contrast, when relatively low knowledge is perceived, the direction of the relation reverses, with ambivalent attitudes used to a slightly greater extent in forming liking judgments than univalent attitudes. The pattern of effects in Study 2 is not contingent on evaluative focus, as was also the case in Study 1. Unlike Study 1, however, the strength (as well as the bolstering) pattern only appears when accounting for perceived knowledge. Further, the use of ambivalent attitudes in Study 2 was mediated through perceptions of a target’s helpfulness in enabling participants to reach a firmer stance only when knowledge was low. Considering the moderated moderation and moderated mediation results cumulatively, Study 2 concludes initial evidence that ambivalent attitude holders are motivated to reduce their ambivalence through a source seen as capable of serving this function, but only when they are able (i.e., when encountered information is likely to be novel).

A limitation of the present research is the measured nature of all predictors when the manipulation (i.e., of focus) were not effective on its own. Prior research in a relevant strength domain (Sawicki & Wegener, 2015) suggests the necessity of attitude holders to be focused on their attitudes for attitudinal bolstering to occur. Thus, in Study
2 evaluative focus was manipulated. Though the manipulation check was successful, with those in the attitude focus (i.e., firmer stance goal) condition reporting greater motivation to reach a firmer stance than those in the no focus (i.e., no goal) condition, the focus manipulation did not have an effect on the results. Regardless of focus, no interaction of attitudes and ambivalence on the outcome emerged. A possibility is that the single issue, single target design served as a sufficient attitude focus induction, leading all participants to be relatively equally focused on their attitudes. If this were the whole story, a bolstering pattern would be expected across conditions. However, prior research indicates that bolstering patterns should only occur when ambivalent attitudes are capable of being reinforced because existent knowledge is low (Sawicki et al., 2013). When knowledge is high, information (and, by extension, the source of the information) is likely to be less novel and should be seen as less capable of bolstering the attitude and reducing its ambivalent nature, which is somewhat consistent with the current results. Again, though, it is a limitation of the present research that perceived knowledge is measured, not manipulated; further, the amount of actual knowledge or what “high” and “low” reported knowledge indicate remains unknown. Future research would benefit from manipulating either the amount of knowledge through providing varying amounts of information, or perceptions of knowledge by asking participants to provide their actual knowledge and manipulating feedback stating whether they know a lot (or not a lot), relative to others.
Chapter 4: General Discussion

The two studies presented in this thesis examined the role of ambivalence on the effect of attitude similarity on attraction. The aims of this research were to determine if ambivalence affected the predictive value of attitudes on attraction, and if so, to identify contexts necessary for the effect(s) to occur. Thus far, the research has been promising in fulfilling the aims. Though future research is needed to better elucidate the conditions in which ambivalence predictably moderates the effect, the present research has successfully demonstrated that not only does ambivalence modify the effect of attitude similarity on attraction, it may be capable of both attenuating and amplifying the effect.

Specifically, Study 1 found ambivalent attitudes attenuated the effect of attitude similarity on attraction, consistent with an attitude strength account. For those low in ambivalence, attitudes were used robustly in guiding judgments of a target. When the target agreed with their position, they liked the target; when the target disagreed with their position, they liked the target significantly less. Highly ambivalent people were less inclined to use their conflicted attitudes in determining liking for a target. Whether the target was proattitudinal or counterattitudinal made less of a difference when ambivalence was high. This pattern emerged regardless of evaluative focus or target ambivalence.

Study 2 replicated the attenuated impact of attitudes on liking when ambivalence is high, but only when perceived knowledge was also high. When perceived knowledge was low, ambivalence tended to amplify the attitude’s impact, with higher ambivalence
attitudes predicting target liking to a greater extent than attitudes held with lower amounts of ambivalence. Further, the bolstering pattern observed when knowledge was low was mediated by perceived helpfulness of the source in providing information that enabled ambivalence reduction. These results are consistent with prior research outside of the attraction domain that found proattitudinal information to be more appealing and more helpful to ambivalent attitude holders (Clark et al., 2008; Sawicki et al., 2013). In Study 2, the evaluative focus manipulation used in Study 1 was modified to be more akin to a goal induction, directing those in the attitude focus condition to reach a firm stance (i.e., resolve any ambivalence) by the conclusion of the study. Like Study 1, the manipulation did not produce different effects between conditions. Thus it may be the case that evaluative focus is not necessary for ambivalence effects. However, given some methodological and conceptual limitations across the two studies, it seems premature to rule it out entirely at this point.

Limitations and Alternative Explanations

First, the designs of Study 1 and Study 2 differed quite dramatically. The fundamental methodology employed both in early attitude similarity and attraction studies and a more recent experimental design (Byrne, 1961; Sawicki & Wegener, 2015) was retained in the present research, such that attitudes are reported before learning the attitude(s) of a stranger and being asked to make a liking judgment of said other based on provided information. Study 1 additionally included a great deal of filler issues, attitude property measures, and non-target liking judgments, and found attitude strength effects regardless of either an evaluative focus or a target ambivalence manipulation. Study 2
eliminated the irrelevant issues, measures, and liking judgments, focusing solely on the
single issue of interest and an unambivalent target other, and found both strength and
(some) bolstering effects again regardless of an evaluative focus manipulation. On one
hand, Study 2 can be considered a useful extension of Study 1. In addition to identifying
the role of knowledge on the use of (un)ambivalent attitudes when making liking
judgments of a target, a nearly entirely overhauled design was still shown to be capable
of producing differential attitude effects. On the other hand, with such divergence from
Study 1, it is difficult to discern whether or when evaluative focus may be necessary.

It seems possible that stripping away all other attitude objects, attitude property
measures, and filler targets while adding more target- and issue-relevant information may
have led everyone in Study 2 to be focused on their attitude, regardless of condition. In
contrast, all of the additional content in Study 1 may have prevented everyone from being
focused on the issue-specific attitude, regardless of condition. In comparing the results of
the two studies to effects of certainty in an attraction setting (Sawicki & Wegener, 2015)
and similar effects of both certainty and ambivalence with knowledge in a selective
exposure domain (Sawicki et al., 2011; Sawicki et al., 2013), the pattern of results across
the two studies is consistent with this speculation. The strength pattern in Study 1 recalls
the non-attitude focused patterns found for certainty on attraction, whereas the dual
patterns observed in Study 2 is in part simultaneously consistent with both the attitude
focused results for certainty, and to a greater extent the role of knowledge for both
certainty and ambivalence. In essence, could the study designs (rather than the
manipulations) have yielded different evaluative focus across studies, instead of within as
intended?
If this were the case, moreover, it is unclear whether an attitude focus is necessary for knowledge effects to emerge as they did in Study 2. The notion that everyone may have been essentially attitude focused does not permit interpretation of the knowledge effects independent of evaluative focus. Put another way, it is unclear whether a manipulation of evaluative focus is not needed for knowledge effects to emerge (i.e., if the manipulation failed to work and no one was particularly attitude focused). Or, conversely, if people need to be focused on their attitudes in order to get the effect (i.e., if compounding the manipulation with the single issue study design worked against the manipulation and led even those in the non-attitude focused group to be relatively focused on their attitudes). A limitation of Study 1 is its lacking inclusion of a knowledge measure. In keeping with the possibility that Study 1 and Study 2 induced a non-attitude focused and an attitude focused mindset, respectively, it would have been beneficial to have reports of perceived knowledge in Study 1 to better determine if the overall strength pattern that emerged may have been moderated to some extent by measured knowledge, or if the role of knowledge is contingent on greater attitude focus. Replicating Study 1 with the addition of such a measure could be a first step in speaking to this question.

A second challenge posed by the differing designs lies in determining the role of both source and issue information. It may not be the case that the multi- versus single-components distinction between the two studies led to differing evaluative focuses and that it was this difference which yielded the observed patterns. The other prominent distinction between the two studies is that while both studies shared an identical issue and used the same attitude and ambivalence measures, there exists an information discrepancy prior to making liking judgments. In Study 1, participants were given no
information about the issue besides the name of the issue (i.e., “taxing junk food”) when being asked to report attitude favorability and subjective ambivalence toward the topic. Shortly thereafter, they were asked to provide liking judgments for the target, based on provided reproductions of the target’s responses on nearly identical favorability and ambivalence scales. Beyond the target’s responses, the only information known to participants was the target’s first name (i.e., Pat) and the fact that Pat was a former participant in an earlier version of the study. In Study 2, participants in the no focus condition also had no information about the issue before being asked to evaluate it. Those in the attitude focus condition, however, were given some context about the issue prior to being asked for their evaluations as part of the attitude focus manipulation. Specifically, they were told that legislators were currently considering the issue to promote healthier eating and raise money for various purposes, and it is a fairly recent issue about which most people are unfamiliar, before being directed to reach a firm stance on the issue by the study’s conclusion. As there were no differences between evaluative focus conditions in this study, this early information is likely inconsequential.

However, all participants in Study 2 were introduced to a target with fairly expert credentials (i.e., a graduate student in Business and Economics at Stanford who had recently completed a thesis on the topic). On one hand, the specific information could

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5 As Study 1 was an online study drawing from a national sample, it seems unlikely that telling participants the target was a former study participant provides any additional information about the target. This may be less of the case in a different sample; for instance, if it were a study drawing from the local student pool, “former participant” may suggest another student of the university (i.e., an ingroup member). However, even when people have been aware in the past that the purported stranger was nearby, this has not produced a halo effect capable of wiping out the effect of attitude similarity on attraction (e.g., Byrne, 1971).
make the target seem less similar than the vague target in Study 1 who at the very least had study participation in common with the person making the judgment. Study 2 was conducted at a public, rather than private, university, and participants were all undergraduates, not graduate students. On the other hand, the information could make the target seem more similar than the target in Study 1, if participants make a connection based on both being in some kind of school and/or field of study. Beyond similarity differences, it is also possible that the target in Study 2 is inherently more (dis)liked than the target in Study 1 based on prior attitudes toward graduate school students, his specific institution, and/or his area of study. There is no comparison target in Study 2, so it is unclear how this information in isolation may have affected judgments of the target.

One last difference in provided information is the moderately strong pro-issue message purportedly made by the target. In Study 2, all participants read this information prior to making liking judgments of the target. As such, the issue is less unfamiliar by the time of reported liking than it was in Study 1. Furthermore, it raises the possibility that a proattitudinal target is seen less as a potential source of ambivalence reduction and more as an actual source of ambivalence reduction in that the provided information may have already enabled ambivalent attitude holders to resolve their ambivalence prior to making the liking judgments. It is additionally unclear whether the knowledge effects are contingent on the provision of a message. However, it can also be argued that just as consensus can make one more certain of their attitude, a target who agrees with an ambivalent attitude holder may also reduce ambivalence, particularly when prior knowledge about the issue is low. If this is the case, the Study 1 target may also have been seen less as a potential source of ambivalence reduction when proattitudinal, and
more as an actual source of reduction. As knowledge was not measured in Study 1 and the sample differed from that used in Study 2, it is impossible to assert that knowledge was generally quite low in Study 1.\textsuperscript{6} More research is needed to shed light on these claims.

One conceptual note to highlight is the assessment of target liking. The items hung together rather well in Study 1, though to a lesser extent in Study 2. Study 2 retained the straightforward “how much do you like [the target]?” item from Study 1, but the second item used was novel, asking the extent to which participants would enjoy spending time talking with the target. It is unclear whether the lack of fit is due to the items themselves, the different sample characteristics across studies, the new design introduced in Study 2, or a general variability found across attraction items used in this context (e.g., Sawicki & Wegener, 2015). Future research should aim to capture a more consistent index of liking, if possible.

A final conceptual concern regards the distinction between uncertainty and ambivalence. The pattern of effects found in the present research is directionally consistent with prior attraction research investigating the role of attitude certainty (Sawicki & Wegener, 2015). Further, ambivalent and doubtful attitudes can create parallel patterns of outcomes in a selective exposure setting (Sawicki et al., 2011; Sawicki et al., 2013). Thus, the skeptical reader could argue that attitudinal uncertainty is

\textsuperscript{6} In fact, other data not reported in the current manuscript drawing from national samples suggests the opposite; perceived knowledge on this issue is much higher in these samples (e.g., $M = 3.82$, $SD = 1.73$, compared to Study 2’s $M = 2.70$, $SD = 1.39$). However, the prevalent strength-related effects observed in Study 1 are not inconsistent with the assumption of relatively high knowledge, as the strength pattern was observed in Study 2 for those high in knowledge as well.
primarily responsible for the current effects, rather than ambivalence. A shortcoming of the present research is the lack of measured attitude certainty; without those data, the certainty explanation cannot be entirely ruled out. It is possible that in this context, doubt and ambivalence may be highly correlated, and controlling for both in the same model would lead ambivalence effects to drop out in favor of uncertainty effects. However, attitude strength research on selective exposure has found the opposite pattern, with certainty effects becoming nonsignificant when controlling for the (significant) effect of ambivalence (Sawicki et al., 2013). The relation between subjective ambivalence and certainty has been mixed in the literature, with some research reporting no relation (McGraw, Hasecke, & Conger, 2003), and other research finding a negative correlation between the constructs (Petrocelli, Tormala, & Rucker, 2007). Despite the negative relation, Petrocelli et al. (2007) found the influence of consensus affected certainty, while leaving subjective ambivalence unchanged. Further, other work has suggested that increasing confidence in one’s attitude does not simultaneously decrease ambivalence; rather, it amplifies the influence of ambivalence (that is to say, confidence in an ambivalent attitude leads the ambivalence to have a greater impact on the attitude; Clarkson et al., 2008). Although outside of an attraction context, taken together these studies provide evidence of attitudinal ambivalence and uncertainty operating as distinct constructs.

Of course, some research would suggest that ambivalence and doubt are both associated with discomfort. That is, in the Model of Ambivalence-Induced Discomfort (MAID; van Harreveld et al., 2009), the need to make a decision concerning an ambivalent attitude object intensifies the experience of ambivalence due to the
uncertainty about the outcomes of the decision. Put another way, when faced with such a choice the incongruent reactions toward the object become accessible, leading one to feel uncertain about how to proceed in the decision process. Though both ambivalence and doubt are associated with discomfort, uncertainty stems from ambivalence in this model. It is possible, then, to suggest another alternative explanation involving uncertainty in the present research: a mediational model whereby ambivalence gives rise to feelings of uncertainty about the target, through which liking judgments of the target are made. In a typical strength pattern, one might expect that unambivalent attitude holders feel quite certain that they ought to (dis)like a target who (dis)agrees with them. This attitudinal certainty should then lead the unambivalent attitudes to be used predictably as a guide in forming judgments. Conversely, ambivalent attitude holders may doubt the extent to which they should like a target agreeing either with their dominant or conflicting reactions, leading their attitudes to be used less when judging the target. When concerned with reducing ambivalence, however, ambivalent attitude holders may in this context be more certain that a proattitudinal target would be helpful (or a counterattitudinal target unhelpful) in bolstering their attitude. In this situation, the certainty of target (un)helpfulness ought to promote greater attitude use in forming liking judgments. To test each of the two posited alternative theories and better clarify the roles of both ambivalence and doubt in an attraction setting, measures of attitude certainty should be included in future research.

*Attitude Strength and Bolstering Effects on Attraction*
The challenges of the present studies ought not to discourage future research in this area or detract from the contributions advanced. A long history of research in the attraction domain has found that perceptions of similarity between the person and some other yields robust effects on liking (Montoya, Horton, & Kirchner, 2008). Similarity effects on attraction have been shown across myriad dimensions of comparison, including attitudes and beliefs (Byrne, 1961; 1971). Simply stated, we find it agreeable when others agree with us. However, it is not always the case that behavior is in accordance with attitudes. What was once seen by many as something of a crisis in attitude theory has inspired a wealth of research on determinants of attitudes that may be predictive of behavior at times, but less so at others (see Petty & Krosnick, 1995). Understanding the properties of attitudes has been enormously beneficial for situating them in a behavioral context. Countless behaviors we engage in involve interactions with others. Why then not seek to better understand how our attitudes may affect, enable, or prohibit these interactions?

In general, ambivalent attitudes are not strong attitudes. They guide behavior less, are more subject to change over time, and are less likely to hold up in the face of an attack. Further, they can lead to avoidance of decisions (van Harreveld et al., 2009b), which may not be functional in a context when a choice is needed or would be to the ambivalent decision maker’s benefit. They are also pervasive. Many complex issues (e.g., policy, religion, major life changes), even when seen as generally (un)favorable, are marked by opposing qualities that one can easily recognize as also valid. Do we build an oil pipeline that would be beneficial to the economy but detrimental to the environment? Should one take the better job though it is in an unfavorable climate? Less consequential
attitudes can still be plagued by ambivalence, such as how to spend one’s evening. An ambivalent attitude can create mental gridlock – how does one maintain consistency when any action would be to some extent inconsistent? Just as vehicular gridlock is aversive, we do not wish to remain stuck in a holding pattern of conflicted thoughts and feelings. Therein lies the fascinating paradoxical nature of ambivalence: despite structural weakness, the motivation to reduce ambivalence can be quite strong.

The positions held by others are known to be highly impactful for one’s own views (Festinger, 1954). Navigating a world subject to our own perceptions, it is reassuring to know that our attitudes are shared and seen as valid. This can be particularly helpful when one has a motive to reinforce an attitude because it is held with doubt (e.g., Sawicki & Wegener, 2015; Sawicki et al., 2011) or with ambivalence (e.g., Clark et al., 2008; Sawicki et al., 2013). The findings presented in this thesis suggest that when this motive is present and ambivalence is capable of being reduced, ambivalent attitudes may function as if they are strong and guide attitude-consistent behavior. Though the interaction pattern of attitude by ambivalence was not strong enough to point to a significant bolstering pattern, the simple effects were directionally consistent. The theoretical contribution extends attitude strength research on ambivalence to the previously uncharted domain of interpersonal attraction. The implications for this research can be seen as extending beyond the lab as well. For example, near an election one who is ambivalent about a candidate or a contentious issue may be drawn to a source advocating their dominant reaction, while avoiding those who advocate for their conflicting reaction. Or, a medical patient considering a more invasive but highly successful procedure while favoring minimally invasive therapy that has a greater
likelihood of necessitating subsequent treatment may be more drawn to a conservative
doctor who the patient believes can bolster his or her ambivalent attitude toward the
therapy option.

Future Directions

More research is needed to clarify the role of ambivalence on attitude similarity in
an attraction setting. The two studies presented provide a base from which to better
elucidate the nature of the reported effects. First steps include conducting future studies
that manipulate the different settings created in each study. Studies in this manner will
shed light on the roles of issue context, source information, and issue information. For
issue context, a manipulation would involve considering the target issue and strength-
related property of ambivalence in isolation versus in conjunction with other issues.
Regarding source information, a study that manipulated whether source information was
provided (e.g., Study 2) or not (e.g., Study 1) would inform whether having more context
for the target affects liking judgments, and whether this is necessary for suggestions of
bolstering to emerge. This manipulation may be effective in successfully manipulating
evaluative focus, or may be shown to attenuate the effects of a distinct evaluative focus
manipulation. An issue information manipulation might include asking participants to
report liking for the target either before or after the information is provided. It may be the
case that simply anticipating proattitudinal or counterattitudinal information (e.g.,
Priester, Petty, & Park, 2007) is sufficient to observe the effects, without confounding the
anticipation with actual information. Additionally, for evaluations made prior to receiving
information from the target, it may be useful to manipulate expectancy of information
(i.e., whether it is known that information is coming) Finally, measuring knowledge consistently in future studies is needed. Future research would also benefit from identifying an index of liking that generally maintains good inter-item reliability across samples.

Potentially most important to identify in subsequent studies is the role (if any) for evaluative focus, which first requires a successful within-study manipulation. As it is crucial to observe bolstering affects for uncertain attitudes (Sawicki & Wegener, 2015), it seems highly plausible that it may play some role for ambivalent attitudinal bolstering. It also seems possible that the two studies separately prompted a non-attitude focused and an attitude-focused mindset rather than successfully manipulating focus within either study. Of course, doubt and ambivalence are separate constructs; as such, evaluative focus may not be relevant for ambivalent attitudes in an attraction setting. Prior research suggesting that having to make a choice motivates ambivalence reduction (van Harreveld et al., 2009a) could also inform the context needed for different patterns to emerge on liking. Somehow making the target judgment more choice-involving may be a worthwhile avenue to explore.

Clarifying the role of ambivalence in the present, unknown target setting is needed before extending the research into comparable settings. For example, it is inconsistent with our belief that our attitude is valid when someone we like and trust does not share it, which inspires ambivalence in the attitude (Priester & Petty, 2001). The present research is the first known attempt to flip the context and ask what happens when one is already ambivalent in their attitude, and encounters another person who is not. Though presently confined to an unknown other, implications can be considered for both
strangers and friends alike. On one hand, balance theory suggests that when an inconsistency arises between attraction and agreement, the weaker of the two sentiments is changed (Heider, 1958). If one holds a weak (i.e., ambivalent) attitude but is not at all ambivalent about their friend, it seems likely that the ambivalent attitude would change to be more in line with the friend’s attitude. However, might this depend on if the dominant reaction of the ambivalent attitude matches the valence of the friend’s attitude? It could also be the case that when considering a specific ambivalent attitude, a person would find their proattitudinal friends more attractive and their counterattitudinal friends less attractive, relative to baseline. This is but one direction research on evaluative tension in an interpersonal setting can take. The findings presented here may generate further theoretical questions awaiting empirical study.
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