

Thinking as a social group or thinking as a social group member: Different implications for attitude change

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When participating in groups, an individual may think of him or herself as an individual member of a group or may think about the group. Does this difference matter in the way that information is processed and attitudes are changed? We will argue that the consequences of the two perspectives matter in important ways. Using the lens of vicarious dissonance, we will show that attitude-discrepant behavior creates different opportunities for attitude change, depending on the perspective that is accessible in memory. Identification, motivation, and the direction of change depend on the individual vs. group perspective that the individual adopts.

The study of how our group memberships influence our attitudes—and therefore our behavior—has been one of the defining areas of research for social psychology. Since its inception, social identity theory (e.g., Tajfel, 1972, Tajfel & Turner, 1986) has made a tremendous impact through studying the ways in which our myriad group memberships and identities influence our self-concept and behavior. Although there is a substantial body of research on how group memberships affect the attitude-behavior link (e.g., Smith & Louis, 2008; Smith & Terry, 2003; Terry et al., 2000), SIT has become increasingly popular to apply in the domain of attitudes and attitude change (for a review, see Hogg & Smith, 2007). In this chapter, we seek to explore ways in which individual vs. group contexts shape the processes of attitude change. One commonly-studied way in which our group memberships shape processes of attitude change is through examination of differential ingroup vs. outgroup effects—in other

words, contrasting how processes operate on the self in the absence of a shared group membership with others vs. how they operate in a shared ingroup. Less common, however, is the study of how our situationally salient social identities—i.e., whether we are thinking of ourselves as a student or psychologist, Democrat or American—impact processes of attitude change *within* an ingroup. Ultimately, through analysis of our ongoing research investigating vicarious dissonance (Norton et al., 2003; Monin et al., 2004), we hope to illuminate the ways in which these two different perspectives—identity as an individual within a larger group and identity as a group member—have differential consequences for attitude change. In the process of exploring differential effects of identity salience (see Bruner, 1957; Oakes, 1987), we will discuss social identity theory as it relates to attitude change processes (see Hogg & Smith, 2007, for an in-depth review) as well as current topics in group-based dissonance theory: metaconsistency (McKimmie et al., 2003; McKimmie et al., 2009), cross-cultural differences in dissonance arousal and reduction (Hoshino-Browne, 2005; Kitayama et al., 2004), and intragroup dissonance (Glasford et al., 2008; Glasford et al., 2009).

The continuum between metaconsistency, intragroup dissonance, and vicarious dissonance is a theoretically important one for examining differential effects of identity salience on attitude change in the context of group membership: metaconsistency addresses how we change our attitudes by conforming to consistency norms instantiated by other ingroup members' behavior, intragroup dissonance addresses how our attitudes change in response to the behavior of the ingroup itself, and vicarious dissonance addresses how our attitudes change in response to observed, specific instances of another ingroup member's behavior. Conceptually, these areas of research represent concerns with one's own behavior in relation to others' behavior and the group's behavior: in intragroup dissonance, one is concerned with how one's attitudes and

behavior relate to the group as a whole; in metaconsistency, one is concerned with how one's attitudes and behavior compare to other group members' relationship to the group as a whole; finally, in vicarious dissonance, one is concerned with how one's attitudes and behavior relate to other group members. Though these differences are subtle, we shall see that they have different implications for the effects of thinking about oneself as an individual within a larger group or as a group member whose identity is submerged in the group.

Social Identity and categorization theories

Self-categorization theory (Turner et al., 1987) lends powerful insight to how our different group memberships and identities help construct our self-concept and, in turn, influence our attitudes and behaviors. When thinking about ourselves (or others) as members of a larger group—i.e., categorizing ourselves—we do not regard our own specific, idiosyncratic attitudes or behaviors in isolation but rather view them in the larger context of the group to help inform our self-concept (Tajfel & Turner, 1979). Through this process, we come to understand who we are in the group (and what the group means for our own identity) through comparing ourselves to a specific group prototype. We are highly motivated to reduce feelings of uncertainty about our self-concept (Hogg, 2000, 2007), and maintaining positive distinctiveness from outgroups (Tajfel & Turner, 1979) and each other (Brewer, 1991), helps us create a clear and defined self-concept. In the context of attitude change, comparisons with group prototypes allows us to evaluate group members (including ourselves) as conforming or not conforming to various aspects of the group prototype—we can then generate expectancies about this person's behavior based upon the prototypical attributes, attitudes, and behaviors of the group. As identification increases, this

categorization of the self as a group member transforms our attitudes and self-concept to conform to the group prototype, even in the absence of group-based processes of attitude change such as persuasion or discussion (Hogg et al., 1990).

Given that our self-concept contains multiple group identities, we must arrive at a situationally *salient* (see Bruner, 1957; Oakes, 1987) group identity in each context that “becomes the psychologically engaged and operational basis for self-conception and behavior and for the perception and construal of others” (Hogg & Smith, 2007). Based upon the accessibility of a certain identity in memory and the fit of that identity to the current context, a salient identity will quickly and automatically be used as the basis for self-categorization, group identification, and comparison to group prototypes associated with that identity. This salient identity then can become a frame for seeing the world, influencing processing for group-relevant information (e.g., Maitner et al., 2010).

Early work on dissonance and groups

Decades of research investigating cognitive dissonance theory (Festinger, 1957) have provided us with a wealth of knowledge of the ways in which our behavior can change what we believe and how we feel about the world around us. In the past, dissonance research typically has not focused on how the actions of others may change our attitudes, despite Festinger’s own (1957) assertion that social groups can be a source of dissonance as well as a resource for reducing it. Some studies, however, have highlighted how dissonance might occur in group settings: Zanna and Sande (1987) found that participants that behaved counter-attitudinally as part of a group still experienced dissonance and changed their attitudes (just as they would on

their own), as long as the group members did not diffuse responsibility. In another study, Sakai (1999) had participants witness a confederate deceiving a naïve subject into thinking a boring task was interesting. Participants that had tacitly agreed to go along with the confederate's deception rated the task more interesting than did participants that only observed the interaction without the tacit element of choice.

Our group members' attitude change can also have a profound impact on our own attitudes: for instance, our group memberships alone can be a source of dissonance in addition to counter-attitudinal behavior (Stone & Cooper, 2001), and our group memberships can restrict or specify what dissonance-reduction strategies are available to us (Cooper & Mackie, 1983). Nel et al. (1969) observed that a small financial incentive for giving a counter-attitudinal speech (e.g., Festinger & Carlsmith, 1959) induced greater dissonance-related attitude change when the speech's audience was not already committed to a position on the topic. In other words, when there was a possibility of changing group members' attitudes, participants' own attitudes changed more dramatically. While early studies in dissonance that involved groups paved the way for future research on intra- and intergroup dissonance processes, they did not address how our different group memberships—or different identities within our memberships—might affect the preconditions to and consequences of cognitive dissonance arousal.

Metaconsistency and group support

As early group-based dissonance research suggests, it is not only our own attitude-behavior consistency that may affect us, but also the degree of consistency of those around us. Research on metaconsistency—in other words, the consistency between one's own attitude-

behavior consistency and other ingroup members' attitude-behavior consistency—began with the exploration of how group support or nonsupport affected dissonance arousal and reduction (McKimmie et al., 2003). Drawing from a theoretical foundation in social identity theory, research on metaconsistency and dissonance incorporated situationally salient identity as a crucial moderating variable that helps explain when dissonance is produced in groups and the various ways by which it can be reduced. Under conditions of high (focusing on intragroup similarity and intergroup differences), low (focusing on intragroup similarity only), and individual identity salience, McKimmie et al. utilized a hypocrisy paradigm to induce dissonance where participants' own hypocrisy in advocating generosity was either supported or not supported by information about their peers' behavior in the same domain. Consistent with the authors' predictions, participants only changed their attitudes to reduce hypocrisy-induced dissonance under conditions of high salience and behavioral nonsupport. Paralleling modification of the self-concept through disidentification with self-standards violated by dissonant counter-attitudinal behavior in cognitive dissonance (Aronson et al., 1995), participants in the high salience-nonsupport condition employed a group-based dissonance-reducing strategy of disidentification with the ingroup. As we will see in our later discussion of intragroup and vicarious dissonance, the availability of different individual-level and group-level strategies for reducing dissonance can have important implications for the consequences of dissonance arousal.

Dissonance in the group context has been more tightly linked to social identity theory through Robertson's (2006) research on identity salience and dissonance. Drawing on research on the social identity model of deindividuation effects (SIDE; Reicher et al., 1995), Robertson used anonymity as an alternative to priming in order to manipulate identity salience. Since

anonymity reduces perceived ingroup differences while perceived between-group differences remain the same and therefore changes the meta-contrast ratio (Turner et al., 1987), Robertson argues that anonymity increases group salience and adherence to norms of attitude-behavior consistency. Using induced compliance to instantiate dissonance arousal, Robertson observed that participants under conditions of high identity salience (i.e., anonymity) exhibited more attitude change under high choice relative to participants under conditions of low identity salience, and that this effect was mediated by the salience of ingroup membership.

McKimmie et al.'s (2009) recent work on metaconsistency continues the focus of ongoing comparison with ingroup others in the context of dissonance arousal. This research replicated and extended previous findings in behavioral support, showing that it is not *support* per se—i.e., congruence with one's attitude or behavior—that reduces dissonance, but that it is the comparison between one's own attitude-behavior consistency and the attitude-behavior consistency of another ingroup member that has the potential to reduce dissonance. In addition, information gleaned from observing other ingroup members' attitude-behavior consistency also affects perceptions of one's own attitude-behavior consistency, such that witnessing ingroup others' inconsistency reduces judgments of one's own inconsistency. As Robertson (2006) implies, this monitoring of other ingroup members' behavior may reflect motivation to conform to an ingroup's norms for consistency. Crucially, however, inconsistency between another ingroup member's attitude and behavior only reduced dissonance arousal under conditions of high salience, where the shared group membership between the participant and the ingroup member was made explicit. Because ingroup and outgroup status was instantiated through a minimal group (overestimator-underestimator) paradigm, these results are unique in that they show that a group-based strategy for dissonance reduction that does not rely on identification

with the group itself or integration of the group's attitudes and norms into the self-concept.

Though research on metaconsistency provides still more evidence of the pivotal role of identity salience in group-based dissonance arousal and reduction, further exploration is needed in other active areas of dissonance research to identify the necessary and sufficient conditions for effective group-based dissonance-reduction strategies in those domains.

Dissonance across cultures

Further support that dissonance arousal and reduction can vary as a function of group memberships and the self-concept comes from the burgeoning cross-cultural dissonance literature. Early research on cross-cultural dissonance effects was inconclusive: whereas results from some studies implied resistance to traditional dissonance arousal for those in East Asian cultures (Heine & Lehman, 1997), other studies suggested that those in East Asian cultures do in fact show dissonance-induced attitude change (Sakai, 1981; Sakai & Androw, 1980). Whereas Heine and Lehman (1997) used a typical free-choice paradigm, Sakai (1981) used a version of a typical induced compliance paradigm that manipulated whether or not participants would deliver a counter-attitudinal speech privately or publicly. Results from Sakai's study indicated that Japanese participants who gave the speech publicly experienced greater attitude change relative to those participants that gave it in private, suggesting that the public act of giving a counter-attitudinal speech—and its aversive consequences for the participants' interdependent self-concept—aroused cognitive dissonance in the study's participants. In contrast, Heine and Lehman's (1997) Japanese participants did not show a tendency to justify their choices in a free-choice paradigm, unlike their Canadian counterparts.

To resolve these discrepant findings, Hoshino-Browne et al. (2005) conducted a modified version of the typical free-choice paradigm where participants made judgments about Chinese food entrées that were either congruent with their own preferences or with those of an imagined, self-selected close friend. Interestingly, while European-Canadian participants exhibited spreading of alternatives when considering their own (and not their friend's) preferences for Chinese food, Asian-Canadian participants exhibited spreading of alternatives when considering their friend's preferences (and not their own). This finding was replicated for European-Canadian and Japanese participants (Study 2). Using the same paradigm, Hoshino-Browne et al. also measured the effectiveness of interdependent and independent affirmations in reducing cognitive dissonance. While an affirmation containing values typically held to be important in independent societies was ineffective at reducing dissonance for monocultural Asian-Canadians, an interdependent affirmation of cultural values reduced those participants' spreading of alternatives.

Further insight towards the preconditions for dissonance arousal across cultures comes from research by Kitayama et al. (2004). In four studies, Kitayama et al. demonstrated that concerns about positive appraisal by others—primed through questionnaire measures or incidental cues, such as schematic faces—prompts dissonance arousal and spreading of alternatives in a Japanese sample. The absence of these cues, however, meant that European American participants still experienced typical spreading of alternative effects, but Japanese participants did not. Taken together, this body of research highlights the domain-specific nature of dissonance arousal and dissonance reduction strategies that involve the self-concept: as we will see later, the motivation to use and effectiveness of a variety of dissonance-reducing

strategies depend on what facets of the self-concept are salient and under threat at the time of dissonance arousal.

Intragroup dissonance

Though it bears similarities to work on metaconsistency and vicarious dissonance, intragroup dissonance arises when one is made aware of an ingroup's counter-attitudinal behavior. Early work on group-oriented instantiations of dissonance arousal addresses dissonance arousal from the tension arising from holding attitudes discrepant from those of one's fellow ingroup members and the movement to consensus (i.e., attitude change) that reduces it (Matz & Wood, 2005). In this series of studies, Matz and Wood demonstrated that participants assigned to an attitudinally incongruent peer group exhibited greater dissonance discomfort and attitude change than an attitudinally congruent one—this effect is echoed by research on group attitude homogeneity and persuasion indicating that members of attitudinally heterogeneous groups hold more ambivalent attitudes that are less resistant to change (see Levitan & Visser, 2004; Visser & Mirabile, 2008). Matz and Wood also show that this dissonance (and resultant attitude change) created from attitude incongruence could be reduced through traditional methods of dissonance reduction, such as constricting participants' level of choice and giving them an opportunity to self-affirm. More importantly, the authors provided evidence for a variety of other possible interpersonal dissonance-reduction strategies, such as attempts to change other ingroup members' attitudes through persuasive appeals and changing one's own group membership in order to be among attitudinally congruent peers.

Research on intragroup dissonance proper (Glasford et al., 2008; Glasford et al., 2009) has gone beyond examination of dissonance from the mere existence of incongruent attitudes held by group members to elaborate the ways in which counter-attitudinal behavior by one's ingroup in aggregate can arouse dissonance. As we shall also see with vicarious dissonance, intragroup dissonance requires high identification with the group to which one belongs and personal endorsement of the attitude being violated by the group. If one witnesses an outgroup performing a counter-attitudinal behavior, or one's ingroup behaves consistent with one's attitudes, no attitude change occurs. Since—according to social identity theory—individuals draw upon their group memberships in construction of their self-concept (Tajfel & Turner, 1979) and high group identifiers are the most motivated to maintain positive distinctiveness from outgroups (Ellemers et al., 1999), it follows naturally that group-based dissonance processes require group members that are sensitive and well attuned to the attitudes and norms of the group. Unlike results of typical dissonance studies, participants undergoing intragroup dissonance readily use disidentification with the group as a dissonance-reduction strategy over attitude change, supported by the finding that the amount of discomfort produced by the ingroup's counter-attitudinal behavior predicts the extent of disidentification while discomfort does not significantly predict the amount of attitude change.

Disidentification is not the only dissonance-reduction strategy that can be used to reduce intragroup dissonance, however. There is evidence that self-affirmation and group-based affirmations both significantly reduce intragroup dissonance (Glasford et al., 2009), and that when these strategies are used there is a negative relationship between level of group identification and dissonance discomfort. Inspired by past work on preferences for different dissonance-reduction strategies (Stone et al., 2007), Glasford et al. (2009) also manipulated

participants' group identification and gave them a choice between two dissonance-reduction strategies: an opportunity to derogate a disliked outgroup (a group-level strategy) and a behavior-change survey (an individual-level strategy). The authors discovered that when participants were made aware of an ingroup's counter-attitudinal behavior (i.e., when intragroup dissonance was aroused), participants in the high identification conditions were more likely to use a group-level strategy than participants in the low identification conditions and that their explicitly reported strength of preference also reflected this choice. This relationship between group identification condition and strategy preference was sufficiently explained by psychological discomfort, indicating that both strategies effectively reduced dissonance. Importantly, this research establishes the groundwork for studying motivational accounts of dissonance reduction in the context of group-based dissonance processes and provides evidence for domain-specificity in dissonance reduction strategies similar to that seen in the literature on cross-cultural dissonance (e.g., Kitayama et al., 2005)

Vicarious dissonance

A series of studies by Norton, Monin, Cooper, and Hogg (2003) and Monin, Norton, Cooper, and Hogg (2004) have investigated the effects on one's own attitudes when seeing someone else behave counter-attitudinally (Cooper and Hogg, 2007). By having participants watch an ingroup or outgroup member agree to give a counter-attitudinal speech under high or low choice, Norton et al. (2003) found that participants who saw an ingroup member agree (high choice) to do something against their beliefs actually changed their attitudes to be in line with the ingroup member's behavior. By witnessing an ingroup member in a dissonance-producing

circumstance in which that ingroup member's attitudes would have changed, the participants changed their own attitude to match their target's behavior. In other words, they experienced dissonance vicariously. In two follow-up studies, it has been made clear that this vicarious dissonance shares much with cognitive dissonance but also departs from it: while choice and consequences are just as important for arousing vicarious dissonance as they are for cognitive dissonance (e.g., Cooper & Fazio, 1984; Scher & Cooper, 1989), it appears that group identification predicts the attitude change caused by vicarious dissonance. Furthermore, just as cognitive dissonance arouses *personal* discomfort, vicarious dissonance arouses *vicarious* discomfort, or the feeling that one would feel uncomfortable if one took the place of the ingroup member acting counter-attitudinally. Similar to cognitive dissonance, subsequent attitude change appears to alleviate this vicarious discomfort, as participants rating their vicarious discomfort *after* their attitudes show significantly less discomfort than those who rated it before. Departing also from intragroup dissonance's group-oriented focus, vicarious dissonance is distinguished by its individual-oriented instantiation of dissonance arousal and reduction, in which membership of the group nevertheless plays a substantive role.

Monin et al. (2004) expanded these findings to show that participants pay close attention to the attitudes of the ingroup members to whom they are listening in the vicarious dissonance paradigm. Importantly, they showed that participants who witness ingroup members express an attitude and then behave counter-attitudinally do not actually think that the ingroup member changed his or her mind (although, ironically, they may indeed change their attitude when it happens naturally). This rules out the alternative explanation that participants are just conforming to what their ingroup members believe, since they acknowledge that the ingroup member they are observing does not agree with his or her behavior. Once again, the authors

showed that vicarious discomfort was positively related to attitude change, but they also showed that vicarious discomfort was positively related to a measure of empathic concern, indicating that empathy may play an as-of-yet unexplained role in vicarious dissonance. Interestingly though, neither the Norton et al. (2003) nor the Monin et al. (2004) studies found significant results for their measure of perspective taking despite its logical link to vicarious processes, something that needs to be explored further in future vicarious dissonance research.

Vicarious Dissonance and the Social Group: Cognitive accessibility of self vs. group.

Our research on dissonance in groups began by assuming that people can think of themselves as individuals or as group members. One's individual identity can be made salient or one's group identity can be made salient. We assumed that vicarious dissonance is a group level phenomenon such that any increase the accessibility of the group concept would magnify vicarious dissonance. Indeed, we had ample evidence in each of seven experiments reported by Norton et al (2003) and Monin et al (2004) that vicarious dissonance was a function of an individual's identification with his or her social group.

There is a more nuanced version of this question, however. I am a North American. I can think of myself as an individual who happens to be from North America or I can think of myself as a member of a group of people that hale from North America. One might call that the "old news" in vicarious dissonance research and we already know that the more I identify with North Americans, the more a fellow North American's dissonant action creates vicarious dissonance in me. Thinking of North Americans can be framed in at least two different ways. One is that I think North Americans as a group. I can picture the group; I know its boundaries. I have affect toward the group and I can identify with the group.

Another way to think about North Americans is to think about myself as a member of the group called North Americans. In this scenario, when I picture the group, I am in the picture. In fact, the group portrait is taken from my perspective. I am a member and I am the photographer. Is this just a semantic difference or is it one with consequences? We predict the latter. We believe that attitude change following the discrepant behavior of a group member depends on protagonists perceiving themselves as individual members of the group. If the concept of the group is made salient, we predict that that attitude change will not occur.

Vicarious dissonance is a group-based phenomenon, but one that depends on the accessibility of the cognitive representation of group *member*. If the group itself is the accessible cognition, then vicarious dissonance will not occur. We will present evidence shortly to show that this is so.

Vicarious Dissonance as a Function of Attitude or Normative Inconsistency.

When a group member makes a statement that is contrary to his or her attitudes, it is also likely that the behavior is also counter-normative. For example, a college student who advocates a sharp rise in tuition rates is simultaneously acting in contradiction to his or her own attitudes, but is also acting against the perceived norm of the group. College students generally oppose tuition hikes. A group member observing a protagonist make a speech advocating tuition hikes may experience dissonance. But is it because the statement was contrary to the protagonist's own attitudes or was it because the statement was contrary to the putative norm of the group? Either is possible. Typically, cognitive dissonance is thought to arise from a discrepancy between an attitude and a behavior. In our current research, we are examining whether vicarious dissonance stands in contrast to personal dissonance because it can be aroused by deviance from a norm as well as deviance from an attitude.

The evidence we will present in this chapter is a first glimpse that vicarious dissonance arousal occurs through either route: when witnessing counter-attitudinal and when witnessing counter-normative behavior. The research will also show that making group membership accessible produces a fundamentally different phenomenon than making the group accessible.

We used a method similar to Monin et al.'s (2004) study to examine the joint roles of cognitive accessibility and identity salience. Participants were led into a room and instructed that they were about to participate in an experiment assessing campus "linguistic subcultures." They were subsequently informed that they would either be assigned to the "speaker" role and produce a recording for another student to analyze or be assigned to the "listener" role and be asked to make judgments about another participant's recorded statements—in reality, the participant was always assigned to the "listener" condition. While the experimenter left to ostensibly record the other (fictitious) participant's speech, the participant read instructions containing descriptive normative information about students' opinions towards different budget cut alternatives—this kind of information has previously been shown to influence attitudes, behavioral intentions, and behavior (see Prentice & Miller, 1993; Smith & Louis, 2008). In addition, the instructions contained a priming manipulation of identity salience (McKimmie et al., 2003; see Hogg & Hains, 1996), where participants were asked to write down the three most important positive things that they have in common with other undergraduate university students that differentiate them from students at other universities (group salience) or the three most important positive things that make the participant different from all other people (individual salience). This experiment also included a control cell with no identity salience manipulation.

Upon the experimenter's return, the participant listened to a pre-recorded interaction between the other participant and the experimenter. In this interaction, the other participant

expressed his/her stance on the budget cut alternatives and agreed to give a speech that was either counter-attitudinal (but consistent with the descriptive norm provided) or counter-normative (but consistent with the other participant's expressed attitude). Before hearing any actual speech, participants filled out a questionnaire assessing their attitude towards the budget cut alternatives proposed in the study, their personal as well as vicarious discomfort (see Monin et al., 2004), their identification with the ingroup (Hogg & Hains, 1996), and various judgments about their "partner" and other students at their university, including liking, similarity, and representativeness/typicality.

Interestingly, for this study's main attitude measures, it appeared that participants' situationally salient identity produced changes in final attitudes towards the budget cut alternatives such that participants in the individual identity salience conditions underwent more attitude change in the predicted direction than did participants in the group identity salience conditions, regardless of whether the participant witnessed counter-attitudinal behavior. Furthermore, participants also generalized these changed attitudes in judgments about their ingroup's attitudes, rating their ingroup's attitudes to be more positive towards the alternatives under conditions of individual identity salience relative to group identity salience, as per the literature on social projection (Allport, 1924; Monin & Norton, 2003). While this null effect of type of violation (attitudinal or normative) tentatively suggests that vicarious dissonance can be aroused through witnessing *either* attitudinal or normative inconsistency, the effect of identity salience suggests that either a) a salient individual identity is necessary for vicarious dissonance to occur, or b) vicarious dissonance may be reduced through a different strategy than attitude change under conditions of group identity salience.

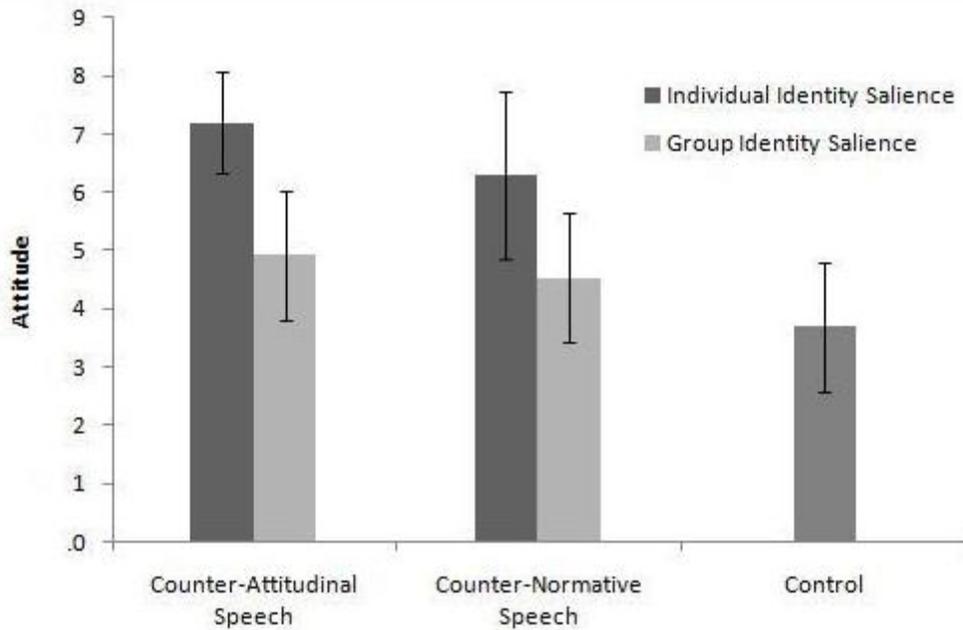


Figure 1. Average support for budget cut alternatives for participants witnessing agreement to write a counter-attitudinal or counter-normative speech with salient individual or group identity. Higher attitude score indicates greater support. Error bars depict standard errors.

To examine these two possibilities, we needed to take a closer look at how other dissonance-related measures were affected by individual vs. group identity salience. Somewhat surprisingly, we observed that participants with a salient group identity actually experienced more personal, perceived other, and vicarious discomfort than those with a salient individual identity and also rated the speech as potentially having more aversive consequences (see Cooper & Fazio, 1984, and Scher & Cooper, 1989). Since vicarious discomfort has been shown to be closely related to attitude change in vicarious dissonance in past research (Monin et al., 2004; Norton et al., 2003), we performed moderation analyses in regression to examine the effect of identity salience on the relationship between vicarious discomfort and attitude change. Interestingly, identity salience significantly moderated the relationship between vicarious discomfort and attitude change. Vicarious discomfort negatively predicted attitude change for

participants with salient group identity, and tended to be positively related to attitude change in the individual salience conditions.

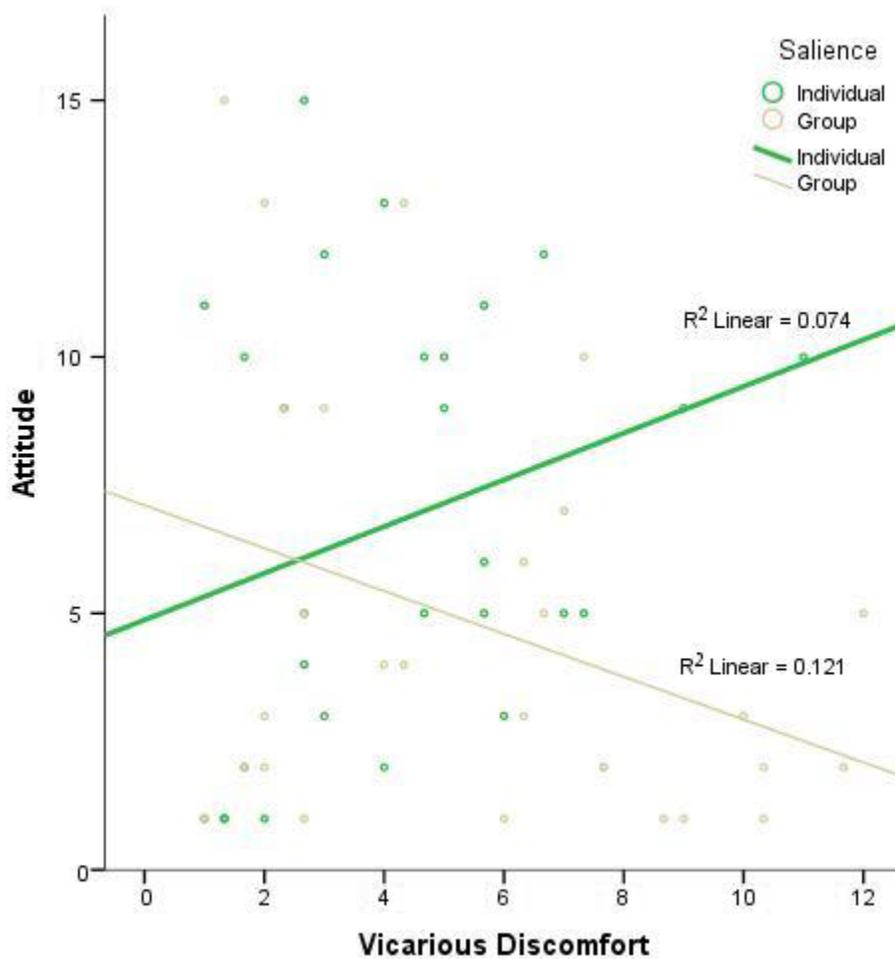


Figure 2. Predicting participants' support of budget cut alternatives using vicarious discomfort and identity salience. This figure shows identity salience moderating the effect of vicarious discomfort on final attitudes. Higher attitude scores indicate greater support.

These curious data that are seemingly inconsistent with past research in vicarious dissonance become elucidated by examination of the participants' ratings of their partner. While our manipulation of identity salience did not produce changes in group identification, it did reveal a significant main effect of identity salience on perceptions of the participant's own

representativeness/typicality and that of his partner, such that participants in the group identity salience believed themselves to be *more* representative of the ingroup and their partner to be *less* representative of the ingroup than participants in the individual identity salience condition, indicating that participants may have used perceived typicality as a strategy for reducing vicarious dissonance.

Based on the results of this study, we suggest that vicarious dissonance can be aroused in conditions of either individual or group identity salience, but that it is likely only reduced through attitude change when there is a situationally salient individual identity—instead of changing their attitudes (an individual-level strategy), participants with a salient group identity may reduce vicarious dissonance through affirming their status as a representative ingroup member and denying that membership to the other participant (a group-level strategy). This strategy may parallel the black sheep effect (e.g., Marques et al., 1988, Marques & Paez, 1994), as well as previously-identified group-level strategies for changing the properties of a group to reduce dissonance: in past research, participants have expressed intentions to change the group's discrepant behavior (Glasford et al., 2008, Study 2), persuaded group members to bring their attitudes in line (Matz & Wood, 2005), or disidentified from the group (Aronson et al., 1995; Glasford et al., 2008; McKimmie et al., 2003) to reduce dissonance discomfort. The results described above lend support to the idea that participants with a salient group identity will make use of group-oriented dissonance-reduction strategies (Glasford et al., 2009) and suggest that reducing an ingroup member's perceived representativeness or typicality is another such group-level strategy for reducing dissonance and maintaining group cohesiveness by bolstering attitude homogeneity.

Conclusion

Across a diverse array of processes of attitude change, situationally salient self-conception as an individual, an individual within a larger group context, or a group member has dramatic consequences for the circumstances that will produce dissonance and the strategies that help reduce it. Recent research in our lab suggests that vicarious dissonance can be aroused through attitudinal and normative channels and that identity salience may moderate the way in which we deal with the accompanying psychological discomfort, but the mechanism behind vicarious dissonance arousal due to witnessing counter-normative behavior is still to be determined. It could even be argued that witnessing counter-attitudinal behavior is only vicariously arousing because it is interpreted as an instantiation of counter-normative behavior. Regardless of its cause, vicarious dissonance fits into a specialized niche in the contemporary dissonance literature and may play a crucial role in intragroup processes and bears further investigation. Future research should also investigate the behavioral consequences of group-based dissonance processes and motivational factors underlying strategy use in its reduction, as these findings could be applied to construct impactful interventions that target and change negative attitudes. If we can identify conditions in which vicarious dissonance does not result in attitude change (such as when a relevant group identity is salient), it is possible that this research may also be used to combat the spread of counterproductive attitudes that spread through the natural occurrence of vicarious dissonance.

REFERENCES

- Allport, F. H. (1924). *Social psychology*. New York: Houghton Mifflin.
- Aronson, J., Blanton, H., & Cooper, J. (1995). From dissonance to disidentification: Selectivity in the self-affirmation process. *Journal of Personality and Social Psychology*, *68*(6), 986-996.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, *17*, 475-482.
- Bruner, J. S. (1957). On perceptual readiness. *Psychological Review*, *64*, 123 – 152.
- Cooper, J., & Fazio, R. (1984). A new look at dissonance. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 17, pp. 229– 268). San Diego, CA: Academic Press.
- Cooper, J., & Mackie, D. (1983). Cognitive dissonance in an intergroup context. *Journal of Personality and Social Psychology*, *44*(3), 536-544.
- Ellemers, N., Spears, R., & Doosje, B. (1999). *Social identity: Context, commitment, content*. Oxford, UK: Basil Blackwell.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, *58*, 203 – 210.
- Glasford, G. E., Dovidio, J. F., & Pratto, F. (2009). I continue to feel so good about us: In-group identification and the use of social identity-enhancing strategies to reduce intragroup dissonance. *Personality and Social Psychology Bulletin*, *35*(4), 415-427.
- Glasford, G. E., Pratto, F., & Dovidio, J. F. (2008). Intragroup dissonance: Responses to ingroup violation of personal values. *Journal of Experimental Social Psychology*, *44*, 1057-1064.
- Heine, S. J., & Lehman, D. R. (1997). Culture, dissonance, and selfaffirmation. *Personality and Social Psychology Bulletin*, *23*, 389-400.
- Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorisation: A motivational theory of social identity processes. *European Review of Social Psychology*, *11*, 223 – 255.
- Hogg, M. A. (2007). Uncertainty-identity theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 39, pp. 69 – 126). San Diego, CA: Academic Press.

- Hogg, M. A., & Hains, S. C. (1996). Intergroup relations and group solidarity: Effects of group identification and social beliefs on depersonalised attraction. *Journal of Personality and Social Psychology*, 70, 295 – 309.
- Hogg, M. A., & Smith, J. R. (2007). Attitudes in social context: A social identity perspective. *European Journal of Social Psychology*, 18(1), 89-131.
- Hogg, M. A., Turner, J. C., & Davidson, B. (1990). Polarised norms and social frames of reference: A test of the self-categorisation theory of group polarisation. *Basic and Applied Social Psychology*, 11, 77 – 100.
- Hoshino-Browne, E., Zanna, A. S., Spencer, S. J., Zanna, M. P., Kitayama, S., & Lackenbauer, S. (2005). On the cultural guises of cognitive dissonance: The case of easterners and westerners. *Journal of Personality and Social Psychology*, 89(3), 294-310.
- Kitayama, S., Snibbe, A. C., Markus, H. R., & Suzuki, T. (2004). Is there any “free” choice? Self and dissonance in two cultures. *Psychological Science*, 15(8), 527-533.
- Leviton, L. C. & Visser, P. S. (2008). The impact of the social context on resistance to persuasion: Effortful versus effortless responses to counter-attitudinal information. *Journal of Experimental Social Psychology*, 44, 640-649.
- Maitner, A. T., Mackie, D. M., Claypool, H. M., & Crisp, R. J. (2010). *Journal of Experimental Social Psychology*, 46, 441-444.
- Marques, J. M., & Paez, D. (1994). The ‘Black sheep effect:’ Social categorization, rejection of ingroup deviates, and perception of group variability. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 5, pp. 37-68). Chichester, UK: Wiley.
- Marques, J. M., Yzerbyt, V. Y., & Leyens, J. (1988). The ‘Black sheep effect:’ Extremity of judgments towards ingroup members as a function of group identification. *European Journal of Social Psychology*, 18(1), 1-16.
- Matz, D. C., & Wood, W. (2005). Cognitive dissonance in groups: The consequences of disagreement. *Journal of Personality and Social Psychology*, 88(1), 22-37.
- McKimmie, B. M., Terry, D. J., & Hogg, M. A. (2009). Dissonance reduction in the context of group membership: The role of metaconsistency. *Group Dynamics: Theory, Research, and Practice*, 13(2), 103-119.
- McKimmie, B. M., Terry, D. J., Hogg, M. A., Manstead, A. S. R., Spears, R., & Doosje, B. (2003). I’m a hypocrite, but so is everyone else: Group support and the reduction of cognitive dissonance. *Group Dynamics: Theory, Research, and Practice*, 7(3), 212-224.

- Monin, B., & Norton, M. I. (2003). Perceptions of a fluid consensus: Uniqueness bias, false consensus, false polarization and pluralistic ignorance in a water conservation crisis. *Personality and Social Psychology Bulletin*, 29, 559-567.
- Monin, B., Norton, M. I., Cooper, J., & Hogg, M. A. (2004). Reacting to an assumed situation vs. conforming to an assumed reaction: The role of perceived speaker attitude in vicarious dissonance. *Group Processes & Intergroup Relations*, 7(3), 207-220.
- Nel, E., Helmreich, R., & Aronson, E. (1969). Opinion change in the advocate as a function of the persuadability of his audience: A clarification on the meaning of dissonance. *Journal of Personality and Social Psychology*, 12(2), 117-124.
- Norton, M. I., Monin, B., Cooper, J., & Hogg, M. A. (2003). Vicarious dissonance: Attitude change from the inconsistency of others. *Journal of Personality and Social Psychology*, 85(1), 47-62.
- Oakes, P. J. (1987). The salience of social categories. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorisation theory* (pp. 117 – 141). Oxford, UK: Blackwell.
- Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64(2), 243-256.
- Robertson, T. (2006). Dissonance effects as conformity to consistency norms: The effect of anonymity and identity salience. *British Journal of Social Psychology*, 45, 683-699.
- Sakai, H. (1981). Induced compliance and opinion change. *Japanese Psychological Research*, 23, 1-8.
- Sakai, H. (1999). A multiplicative power-function model of cognitive dissonance: Toward an integrated theory of cognition, emotion, and behavior after Leon Festinger. In E. Harmon-Jones & J. Mills (Eds.), *Cognitive dissonance theory: Progress on a pivotal theory in social psychology* (pp. 267-294). Washington, DC: American Psychological Association.
- Scher, S. J., & Cooper, J. (1989). Motivational basis of dissonance: The singular role of behavioral consequences. *Journal of Personality and Social Psychology*, 56(6), 899-906.
- Smith, J. R., & Louis, W. R. (2008). Do as we say *and* as we do: The interplay of descriptive and injunctive group norms in the attitude-behavior relationship. *British Journal of Social Psychology*, 47, 647-666.
- Smith, J. R., & Terry, D. J. (2003). Attitude-behavior consistency: the role of group norms, attitude accessibility, and mode of behavioral decision-making. *European Journal of Social Psychology*, 33, 591-608.

- Stone, J. & Cooper, J. (2001). A self-standards model of cognitive dissonance. *Journal of Experimental Social Psychology*, 37, 228-243.
- Stone, J., Wiegand, A. W., Cooper, J., & Aronson, E. (1997). When exemplification fails: Hypocrisy and the motive for self-integrity. *Journal of Personality and Social Psychology*, 72, 54-65.
- Tajfel, H. (1972). Social categorisation. English manuscript of 'La catégorisation sociale'. In S. Moscovici (Ed.), *Introduction à la psychologie sociale* (Vol. 1, pp. 272 – 302). Paris: Larousse.
- Tajfel, H. (Ed.). (1978). *Differentiation between social groups*. London: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks-Cole.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7 – 24). Chicago: Nelson-Hall.
- Terry, D. J., Hogg, M. A., & McKimmie, B. M. (2000). Attitude-behavior relations: The role of in-group norms and mode of behavioral decision-making. *British Journal of Social Psychology*, 39, 337-361.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorisation theory*. Oxford, UK: Blackwell
- Visser, P. S., & Mirabile, R. R. (2004). Attitudes in the social context: The impact of social network composition on individual-level attitude strength. *Journal of Personality and Social Psychology*, 87(6), 779-795.
- Zanna, M. P., & Sande, G. N. (1987). The effects of collective actions on the attitudes of individual group members: A dissonance analysis. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario symposium, Vol. 5* (pp. 151–163). Hillsdale, NJ: Erlbaum.