Balance Theory Revisited: Relationship Issue Relevance

Affects Imbalance-Induced Tension in Workplace Relationships

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Abstract

The present work applies and extends balance theory by examining the role of relevance of issue to the relationship in balance theory processes within the context of workplace relationships. In Experiment 1, a sample of working adults ($N = 81$) reported greater job tension when self-supervisor dissimilarity involved a relationship-relevant (vs. non-relationship) ethical dilemma. In Experiment 2, a sample of working students ($N = 185$) who perceived greater self-supervisor dissimilarity about workplace (vs. family) ethics reported greater job tension, and in turn, less job satisfaction and organizational commitment. Perceiving dissimilarity with a work supervisor in attitudes about relationship-relevant issues may negatively affect outcomes at work. Importantly, these experiments demonstrated that not all dissimilarity is likely to yield negative outcomes; only relationship-relevant (vs. non-relevant) dissimilarity was a catalyst for imbalance-induced tension.

*Keywords:* balance theory, attitude similarity, issue relevance, tension, job satisfaction, organizational commitment
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Research has clearly demonstrated a positive relation between attraction and attitude similarity (Byrne, 1961; Byrne, Bond, & Diamond, 1969; Montoya, Horton, & Kirchner, 2008); similar others receive higher payouts when applying for loans (Golightly, Huffman, & Byrne, 1972), benefit from greater support during negative life events (Westmaas & Silver, 2006), and are preferred as co-workers (Byrne & Nelson, 1965). Although individuals have a preference for others who hold similar attitudes, they inevitably will encounter instances of attitudinal dissimilarity in their personal and professional lives. Furthermore, any such topics of disagreement will vary in terms of how relevant they are to the relationship between two people. In the present research we provide the first empirical examination of whether dissimilarity in attitudes about relationship-relevant topics causes greater tension than dissimilarity in attitudes about non-relationship-relevant topics; we examined outcomes of dissimilarity-induced tension in the context of work relationships.

Balance Theory and Relevance of the Issue to the Relationship

The importance of the self-supervisor relationship is well-documented (Raabe & Beehr, 2003; Sakurai & Jex, 2012), but it is inevitable that individuals sometimes will hold attitudes that are dissimilar to their supervisor. Balance theory provides a useful framework for predicting repercussions of such attitudinal dissimilarity. According to Heider (1958), a balanced state occurs when triadic relations among an individual ($p$), another person ($o$), and an attitude object ($x$) are harmonious (e.g., an individual is in agreement with someone liked or in disagreement with someone disliked). The relations would be considered imbalanced and result in tension if an individual is in disagreement with someone liked. Relations also would be considered
imbalanced if they disagree but are in a *unit relationship* (i.e., they have an ongoing or non-voluntary connection – such as an employee-supervisor relationship) regardless of whether or not they have positive attitudes toward each other. For instance, researchers have suggested that employees who perceived successful managers to be behaving unethically reported lower job satisfaction due to a state of imbalance (Viswesvaran & Deshpande, 1996), and other researchers characterized job satisfaction as “the proxy for the pleasantness of the balanced state” (p. 2010) that employees experience when in agreement with supervisors about job autonomy and family (Chang & Cheng, 2014).

Newcomb (1953) theorized that imbalance-induced tension would be greater to the extent that *x* is an important topic, attitudes about *x* are strongly held, or *p* and *o* are in a close relationship, and subsequent research has supported these ideas (e.g., Davis & Rusbult, 2001). Previous research has illustrated that individuals find others to be more attractive when they agree on interesting (Clore & Baldridge, 1968) and important attitudes (Montoya & Horton, 2012) and that individuals are more likely to shift their attitudes toward the attitudes of a dating partner when the issue is less important to them than it is to their partner (Davis & Rusbult, 2001).

Newcomb (1953) also theorized that tension would be greater to the extent that *x* is jointly relevant to *p* and *o*, but no previous research has empirically tested this hypothesis. Topics of disagreement that are relationship relevant could lead to greater tension because they would be more difficult to avoid and more likely to affect interactions. Although individuals may feel strongly about their political attitudes, disagreement about politics theoretically would be relatively unlikely to cause tension in a workplace relationship (unless the workplace is a political office). Conversely, tension theoretically would be more likely to arise when
disagreements are about topics that are relevant in the context of the relationship (e.g., if an employee and supervisor disagree about quality standards for company products). Thus, we examined repercussions of relationship-relevant versus non-relationship-relevant attitudinal dissimilarity.

**Outcomes of Imbalance-Induced Tension**

Tension in imbalanced triads tends to cause relations to shift toward balance (Heider, 1958). Attitude change is one possible route for reducing imbalance-induced tension; for example, individuals in romantic relationships tend to engage in attitude alignment (attitude change toward the partner’s attitude) after discussing topics of disagreement with their partners (Davis & Rusbult, 2001). Alternatively, individuals may attempt to change the other’s attitude, cognitively distort the other’s attitude, modify their level of liking for the other, avoid topics of disagreement, or simply tolerate the disagreement without change (Byrne & Blaylock, 1963; Newcomb, 1953). However, individuals may find themselves in situations in which they disagree with a supervisor, are unwilling to change their own attitude, and are unable to change their supervisor’s attitude. In such situations, individual work outcomes may be impacted. Similarity in values and attitudes is positively associated with organizational outcomes such as greater employee confidence and job satisfaction (Ashkanasy & O’Connor, 1997; Kalliath, Bluedorn, & Strube, 1999; Vecchio & Bullis, 2001), whereas dissimilarity is associated with negative outcomes such as higher levels of voluntary job turnover, less workplace helping behavior, greater work withdrawal, and greater conflict, negative affect, and performance deficits (Bashshur, Hernández, & González-Romá, 2011; Liao, Chuang, & Joshi, 2008; Tepper, Moss, & Duffy, 2011). Furthermore, attitudinal similarity (e.g., about the topic of ethics) is more predictive of employee outcomes such as job satisfaction than demographic similarity (e.g.,
whether they are same sex), and perceived similarity with a supervisor is more predictive of employee outcomes than actual similarity (Turban & Jones, 1988). These findings suggest that individuals who perceive attitudinal dissimilarity with their supervisor on important issues - regardless of whether such attitudinal dissimilarity actually exists - may experience less positive work outcomes.

We propose that to the extent that individuals hold dissimilar attitudes from their supervisor about workplace ethics and, in turn, experience greater job tension, they should experience less job satisfaction (i.e., quality of work life; Rice, McFarlin, Hunt, & Near, 1985) and, in turn, less organizational commitment (i.e., internalization of organization values and intention to remain with the organization; Benligiray & Sönmez, 2012). In past research, greater job tension predicted lower job satisfaction among retail customer service personnel (Rogers, Clow, & Kash, 1994) and lower organizational commitment among nursing department employees (Bateman & Strasser, 1984). Satisfaction is a well-documented antecedent of commitment according to Interdependence Theory and the Investment Model of Commitment (see Rusbult, Arriaga, & Agnew, 2001 for a review), two long-standing and thoroughly researched perspectives in the social psychological literature on close relationships. In the context of work relationships, job satisfaction similarly is an antecedent of organizational commitment; several studies demonstrated that job satisfaction predicted greater organizational commitment (Farrell & Rusbult, 1981; Liao, Hu, & Chung, 2009; Rusbult & Farrell, 1983). For example, job satisfaction mediated the relationship between perceptions of organization ethical values and job commitment among insurance company employees (Fu & Deshpande, 2014), and job satisfaction mediated the relationship between the quality of the self-supervisor relationship and individuals’ organizational commitment in the tourism industry (Liao et al., 2009). We
extend this literature from the perspective of balance theory by examining attitudinal similarity in the self-supervisor relationship and proposing that negative outcomes (i.e., lower job satisfaction and, in turn, organizational commitment) are produced by tension resulting from perceived relationship-relevant attitudinal dissimilarity with a supervisor.

**Overview and Hypotheses**

We aim to (a) extend balance theory by providing the first empirical investigation of whether attitudinal dissimilarity causes greater tension for relationship-relevant than non-relationship-relevant topics, and (b) apply balance theory principles to examine repercussions of attitudinal dissimilarity-induced tension in a workplace context. In Experiment 1, participants responded to hypothetical scenarios that manipulated, in a between-participants design, perceptions of supervisor attitudinal dissimilarity (vs. similarity) on a relationship-relevant (vs. non-relationship-relevant) ethical dilemma and then reported job tension. In Experiment 2, participants completed a series of questionnaires about their current job and supervisor. In a within-participant manipulation, participants reported their attitudes and their perception of their supervisor’s attitudes about a relationship-relevant topic (workplace ethics) as well as a non-relationship-relevant topic (family ethics). They also reported their job tension, job satisfaction, and organizational commitment.

The experiments were designed to test two hypotheses. First, Newcomb (1953) theorized that relationship-relevant (vs. non-relationship-relevant) disagreements should result in greater tension, but no past research has empirically tested this prediction. Thus, we expected that participants would report greater job tension when they disagreed with their supervisors about workplace ethics (vs. non-workplace ethics; Hypothesis 1; Experiments 1 and 2). Second, imbalanced-induced tension due to disagreement may yield negative outcomes (e.g., Bashshur et
Therefore, we expected that participants’ experience of job tension would mediate the effects of self-supervisor attitudinal dissimilarity in a relationship-relevant domain (i.e., workplace ethics) on their reports of job satisfaction, and in turn organizational commitment (Hypothesis 2; Experiment 2). We did not expect attitudinal dissimilarity in a non-relationship-relevant domain (i.e., family ethics) to have similar associations because imbalance-induced tension should be less likely to occur in non-relationship-relevant disagreements.

**Experiment 1**

The goal of Experiment 1 was to test the theorized impact of relevance of issue to the relationship on imbalance-induced tension. Participants imagined a relationship-relevant or non-relationship-relevant ethical dilemma, imagined that a hypothetical supervisor disagreed or agreed with them about the dilemma, and indicated their degree of job tension. Use of scenarios afforded a high degree of control over experimental conditions and provided a useful initial test of hypothesized relationships. Drawing from balance theory (Heider, 1958; Newcomb, 1953), we predicted that participants would report greater job tension when imagining a disagreement with a supervisor about a relationship-relevant (vs. non-relationship-relevant) ethical dilemma (Hypothesis 1). Furthermore, in the comparison condition in which participants imagined agreement with a supervisor, we did not expect to see an effect of relevance of issue to the work relationship. We also expected that participants would report greater job tension when imagining a disagreement (vs. agreement) about a relationship-relevant ethical dilemma. In the comparison condition in which participants considered an issue that was not relevant to the work relationship, we did not expect to see an effect of supervisor attitudinal similarity. This pattern of results would be consistent with balance theory reasoning that participants would report greater
job tension when they disagreed (vs. agreed) with their work supervisors about workplace ethics (vs. non-workplace ethics).

**Method**

**Participants.** We recruited a non-student sample of employed individuals through the online marketplace Mechanical Turk. Data collection via Mechanical Turk is common, and the quality of data collected has been described as equal to that of traditional methods (Buhrmester, Kwang, & Gosling, 2011; Paolacci, Chandler, & Ipeirotis, 2010). Participants were required to be currently employed and reside in a Western country for inclusion in the sample. After learning about the general topic and time commitment (i.e., 25 minutes, short answer responses needed, $0.30 compensation), 81 participants (women = 37) completed the survey.

Participants were an average age of 31.12 ($SD = 10.35$), and the majority reported being Caucasian (72.80%). Most (64.10%) reported earning a bachelor’s degree or higher, and 35.70% reported completing two years of college or less. Participants resided in 26 different countries, with the greatest number of participants residing in the US (39.5%), the United Kingdom (11.10%), and Canada (8.60%). The largest percentage (41.90%) of participants worked in a service-related industry (e.g., restaurant, retail), and the rest worked in financial (9.90%), academic (11.10%), technology (13.60%), or other industries (23.50%). Participants were employed in diverse positions such as manager (13.60%), service employee (9.90%), executive (7.40%), or assistant (17.30%). The remaining 22.20% reported being a sales person, supervisor, owner, teacher/coach, or other (29.60%). The average reported tenure in their current company was 35.29 months ($SD = 38.88$ months).

**Procedure.** Participants accessed an online survey (REDCap; Harris et al., 2009) and were randomly assigned to one of four conditions in a 2 Supervisor Attitudinal Similarity
(similar vs. dissimilar to supervisor) x 2 Relevance of Issue to the Work Relationship

(relationship-relevant vs. non-relationship-relevant ethical dilemma) between-participants design. Thus, participants completed one of four conditions: 1) similar to supervisor with relationship-relevant ethical dilemma ($n = 22$), 2) similar to supervisor with non-relationship-relevant ethical dilemma ($n = 26$), 3) dissimilar to supervisor with relationship-relevant ethical dilemma ($n = 14$), and 4) dissimilar to supervisor with non-relationship-relevant ethical dilemma ($n = 19$). First, participants visualized a job in which they worked closely with an immediate supervisor named Terry, with whom they interacted on a daily basis and consulted frequently.

**Manipulation of relevance of ethical issue to the work relationship.** Next, participants imagined that their supervisor told them about an ethical issue involving another individual, Morgan. Participants were randomly assigned to read one of two scenarios depicting either a relationship-relevant or a non-relationship-relevant ethical dilemma. The relationship-relevant ethical issue read as follows:

> Please imagine that your supervisor, Terry, tells you about something involving a coworker. Morgan, who works with you and also is supervised by Terry, received a commission (payment of $1000) for a non-refundable sale made to a customer. It turns out that Morgan made false promises to the customer about the product in order to convince them to make the purchase, which earned Morgan $1000.

In contrast, the non-relationship-relevant ethical issue read as follows:

> Please imagine that your supervisor, Terry, tells you about something involving a neighbor. Morgan, who lives next door to Terry, received a free month’s rent ($1000) for referring someone new to the housing complex. It turns out that Morgan made false
promises to the new person about the housing complex in order to convince them to sign a binding lease, which earned Morgan $1000.

Participants reported their level of approval of Morgan’s behavior and answered follow-up manipulation check questions about the issue (i.e., “How relevant do you think this issue is to the relationship you have with Terry as your supervisor?” and “How important do you think it is that you and Terry agree about this issue?”).

**Manipulation of supervisor attitudinal similarity.** Afterwards, participants were randomly assigned to imagine that their hypothetical supervisor, Terry, agreed (or disagreed) with their opinion regarding Morgan’s actions. Furthermore, they imagined that they had encountered many similar types of situations while at this job and that Terry typically had similar (or dissimilar) opinions to their own. Participants in the similar-to-supervisor condition read:

*Please imagine that you and Terry agree about whether Morgan should have misled the customer [person] in order to make the sale [make them sign the lease]. Please imagine that you have encountered many similar situations while at this job, and that you agree with Terry on these types of issues far more often than not.*

In contrast, participants in the dissimilar-to-supervisor condition read the same instructions, but they read that Terry disagreed with them and that they disagreed with Terry more often than not.

Participants were then instructed to “think about the sales job with Terry as your supervisor” while completing a measure of job tension. Last, they provided demographic information.

**Measures.**
Job tension. Participants completed the 7-item Job Tension Scale (House & Rizzo, 1972; \( \alpha = .93 \)) in reference to the described job with Terry. On a 7-point scale (1 = strongly disagree; 7 = strongly agree), participants responded to items such as “I would work under a great deal of tension.”

Manipulation checks. Participants completed four manipulation check questions. On a 7-point scale (1 = strongly disagree/not at all; 7 = strongly agree/very much), participants reported the extent to which they perceived that their supervisor agreed with them (“Does Terry agree with your opinion about Morgan?”) and the relevance of the topic to the workplace setting (“How relevant to your job with Terry is the topic of the scenario about Morgan?”). On a 9-point scale (0 = very irrelevant/important; 8 = very relevant/important), participants also indicated the relevance of the topic to their relationship with their supervisor (“How relevant do you think this issue is to the relationship you have with Terry as your supervisor?”) and the extent to which they felt agreement with their supervisor on the topic was important (“How important do you think it is that you and Terry agree about this issue?”).

Results

Preliminary analyses. We first assessed whether our manipulations were effective. Participants in the similar-to-supervisor condition \((M = 5.35, SD = 1.72)\) perceived that their supervisor agreed with them to a greater extent than participants in the dissimilar-to-supervisor condition \((M = 2.06, SD = 1.12)\), \(t(79) = -9.68, p < .001, d = 2.27\). Second, participants who read about a relationship-relevant ethical dilemma \((M = 5.39, SD = 1.50)\) reported that the topic was more work relevant compared to participants who read about a non-relationship-relevant ethical dilemma \((M = 3.96, SD = 1.97)\), \(t(79) = -3.61, p = 0.01, d = 0.82\). We examined the effect of issue relevance to the work relationship on various additional measures. Participants who read about
the relationship-relevant ethical dilemma ($M = 5.67, SD = 1.84$) considered it to be more relevant to their relationship with their supervisor compared to those who read about the non-relationship-relevant ethical dilemma ($M = 3.36, SD = 2.29$), $t(79) = -4.92, p < .001, d = 1.11$. Likewise, participants who read about the relationship-relevant ethical dilemma ($M = 6.03, SD = 1.89$) indicated that agreement with their supervisor about the issue was more important compared to those who read about the non-relationship-relevant ethical dilemma ($M = 4.69, SD = 2.21$), $t(79) = -2.88, p = .005, d = 0.65$. Men ($M = 3.73, SD = 1.54$) did not report greater tension than women ($M = 3.65, SD = 1.55$), $t(79) = 0.24, p = .81$.

**Job tension as a function of supervisor attitudinal similarity and relevance of issue to the work relationship.** We conducted a 2 Supervisor Attitudinal Similarity (similar vs. dissimilar to supervisor) x 2 Relevance of Issue to the Work Relationship (relationship-relevant vs. non-relationship-relevant ethical dilemma) between-participants analysis of variance predicting perceptions of job tension (see Figure 1). Consistent with balance theory, a significant main effect of supervisor attitudinal similarity emerged, $F(1, 77) = 10.38, p = .002, \eta^2_p = .12$, such that participants who imagined that their supervisor had a dissimilar attitude ($M = 4.27, SD = 1.49$) reported greater perceived job tension than participants who imagined that their supervisor had a similar attitude ($M = 3.30, SD = 1.46$). A significant main effect of issue relevance also emerged, $F(1, 77) = 6.53, p = .01, \eta^2_p = .08$, such that participants who imagined the relationship-relevant ethical dilemma ($M = 4.09, SD = 1.63$) reported greater perceived job tension than participants who imagined the non-relationship-relevant ethical dilemma ($M = 3.38, SD = 1.40$).

To test Hypothesis 1, we conducted simple planned contrasts to test whether participants who imagined disagreeing with their supervisor about a relationship-relevant ethical dilemma
reported greater job tension than participants in each of the other conditions. In support of Hypothesis 1, participants who imagined disagreeing with their supervisor about a relationship-relevant ethical dilemma ($M = 5.00, SD = 1.49$) reported greater job tension than participants who imagined disagreeing with their supervisor about a non-relationship-relevant ethical dilemma ($M = 3.73, SD = 1.27$), $t(77) = -2.54, p = .013, d = 0.92$, participants who imagined agreeing with their supervisor about a relationship-relevant ethical dilemma ($M = 3.51, SD = 1.46$), $t(77) = -3.06, p = .003, d = 1.01$, and participants who imagined agreeing with their supervisor about a non-relationship-relevant ethical dilemma ($M = 3.70, SD = 1.54$), $t(77) = -3.97, p < .001, d = 0.86$.

The interaction between supervisor attitudinal similarity and relevance of issue was not significant, $F(1, 77) = 1.86, p = .18, \eta^2_p = .02$. Although the interaction was not significant, we conducted a simple effect analysis to directly examine our hypothesis about the effect of relevance of issue to the work relationship within the similar- versus dissimilar-to-supervisor conditions. The simple effect of relationship relevance was significant in the dissimilar-to-supervisor condition ($p = .01$), but not in the similar-to-supervisor condition ($p = .35$).

Specifically – and consistent with Hypothesis 1, in the dissimilar-to-supervisor condition, participants who imagined the relationship-relevant ethical dilemma ($M = 5.00, SD = 1.49$) reported greater job tension than participants who imagined the non-relationship-relevant ethical dilemma ($M = 3.73, SD = 1.27; d = 0.92$); however, in the similar-to-supervisor condition, participants reported similar levels of job tension whether they imagined a relationship-relevant ethical dilemma ($M = 3.51, SD = 1.46$) or imagined a non-relationship-relevant ethical dilemma ($M = 3.13, SD = 1.46; d = 0.26$).
We also conducted a simple effect analysis to examine the effect of supervisor attitudinal dissimilarity within the relationship-relevant versus non-relationship-relevant ethical dilemma conditions. The simple effect of supervisor attitudinal similarity was significant in the relationship-relevant condition ($p = .003$), but was not significant in the non-relationship-relevant condition ($p = .16$). Specifically, in the context of the relationship-relevant ethical dilemma, participants who imagined that their supervisor had a dissimilar attitude ($M = 5.00, SD = 1.49$) reported greater job tension than participants who imagined that their supervisor had a similar attitude ($M = 3.51, SD = 1.46; d = 1.01$); however, in the context of the non-relationship relevant ethical dilemma, participants reported similar levels of job tension whether they imagined that their supervisor had a dissimilar attitude ($M = 3.73, SD = 1.27$) or imagined that their supervisor had a similar attitude ($M = 3.13, SD = 1.46; d = 0.44$). In sum, although the interaction was not significant, the hypothesized pattern of results in tests of simple main effects was significant.

**Discussion Experiment 1**

The results of Experiment 1 provided initial evidence that individuals would report greater job tension when imagining a supervisor disagreed with them about a relationship-relevant (vs. non-relationship-relevant) ethical dilemma (Hypothesis 1). Although the interaction between supervisor attitudinal similarity and issue relevance was not significant (possibly due to low power), the results of an a priori planned contrast and the key hypothesized simple main effects analyses were consistent with balance theory predictions. Participants reported greater job tension when imagining disagreement with a supervisor about a relationship-relevant (vs. non-relationship-relevant) ethical dilemma. In addition, participants reported greater job tension in the context of relationship-relevant issues when they imagined dissimilar attitudes (vs. similar attitudes) to their supervisor. This first empirical examination of relevance of the issue to the
relationship in balance theory processes provides suggestive evidence, but a stronger test would increase confidence. The use of hypothetical scenarios allowed for an experimental manipulation of attitudinal similarity (vs. dissimilarity) with the supervisor and a controlled comparison of relationship-relevant vs. non-relationship-relevant topics. However, Experiment 1 is limited because hypothetical scenarios may not provide the strongest test of processes in actual ongoing employee-supervisor relationships. Thus, in Experiment 2 we examined individuals’ perceptions of their actual supervisor and workplace outcomes in their actual jobs.

**Experiment 2**

In Experiment 2, we made several key improvements to the research design. First, we used a within-participant manipulation of relevance-to-the-relationship in which participants reported their attitudes and their perception of their actual supervisors’ attitudes about both workplace ethics (relationship-relevant ethics) and family ethics (non-relationship-relevant ethics). Examining attitudinal dissimilarity in actual, ongoing work relationships rather than imagined work relationships enhances the external validity of our hypothesis tests and provides a stronger test of our hypothesis for which Experiment 1 provided initial evidence. Second, we operationalized self-supervisor attitudinal dissimilarity differently from the operationalization used in Experiment 1. The use of hypothetical scenarios in Experiment 1 resulted in a categorical variable for self-supervisor attitudinal dissimilarity on a single issue (i.e., similar vs. not), whereas our Experiment 2 measurement of participants’ attitudes and perceptions of their supervisors’ attitudes allowed for a continuous variable of self-supervisor attitudinal dissimilarity that covered a broader range of ethical issues. Third, we added to our model from Experiment 1 by comparing the effects of relationship-relevant attitudinal dissimilarity versus non-
relationship-relevant attitudinal dissimilarity on job satisfaction and organizational commitment through job tension.

We expected to replicate the findings of Experiment 1 (Hypotheses 1) and tested one additional hypothesis. We expected attitudinal dissimilarity in a relationship-relevant domain (i.e., workplace ethics) to be associated with greater job tension, job satisfaction, and organizational commitment (Hypothesis 2). More specifically, we expected that greater job tension would result from attitudinal dissimilarity in a relationship-relevant domain (i.e., workplace ethics) than a non-relationship-relevant domain (i.e., family ethics), which would provide a conceptual replication of Experiment 1’s evidence and a stronger test of Hypothesis 1. We also elaborated on this model to examine whether tension resulting from attitudinal dissimilarity in a relationship-relevant domain might predict downstream employee outcomes, job satisfaction and organizational commitment. Because satisfaction is a well-documented antecedent of commitment in both the social psychological literature (see Rusbul, Arriaga, & Agnew, 2001) and in the context of work relationships (Farrell & Rusbul, 1981; Fu & Deshpande, 2014; Liao, Hu, & Chung, 2009; Rusbul & Farrell, 1983), we examined a model in which greater job tension was hypothesized to lead to lower job satisfaction and, in turn, lower organizational commitment.

Method

Participants. Participants ($N = 185$) included introductory psychology course students who were employed at the time of the study and who were over 18 years of age (women = 112). Participants were an average 20.78 years of age ($SD = 5.11$) and were racially diverse, with 47.60% Caucasian, 27% African American, 8.60% Asian American, 8.60% Latino, 1.10% Native American, and 7% other. The majority (67.60%) of participants worked in a service-
related industry (service, restaurant, retail), whereas the remaining 32.40% worked in financial (2.70%), academic (7.60%), technology (1.60%), or other industries (19.50%). Most participants worked as a sales person (23.20%), service employee (27.60%), or assistant (15.70%). The remaining worked as a manager, supervisor, owner, executive, or teacher/coach (15.70%), or other (17.80%). The average reported tenure was 20.51 months ($SD = 18.44$ months), and they worked an average of 20.54 hours ($SD = 10.52$) per week.

**Procedure.** Participants completed a variety of measures separated into two packets. In the first packet of measures participants reported demographic information and completed questionnaires about their job (e.g., job tension, job satisfaction, organizational commitment) and their ethical attitudes (i.e., workplace ethics and family ethics). In the second packet of measures participants identified the individual who most directly supervised their current work, but with whom they did not socialize outside of work. Next, they completed questionnaires assessing their perception of their supervisors’ ethical attitudes (i.e., workplace ethics and family ethics) and their confidence in rating their supervisor’s attitudes on each scale.

**Measures.** Participants completed the Job Tension Scale ($\alpha = .78$) in reference to their current job. In addition, they completed several new measures.

**Job satisfaction.** Participants completed the 7-item Job Satisfaction Scale (Quinn & Shepard, 1974; $\alpha = .90$). On 5- or 7-point scales (e.g., 1 = *definitely not*; 5 = *definitely yes*, or 1 = *terrible*; 7 = *delighted*), participants responded to items such as “How do you feel about your job overall?”

**Organizational commitment.** Participants completed the 9-item Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979; $\alpha = .93$). On a 7-point scale (1 =
Participants responded to items such as “I really care about the fate of this organization.”

**Workplace ethics.** Participants completed the 9-item Workplace Ethics Scale (Froelich & Kottke, 1991; $\alpha = .85$). On a 7-point scale (1 = strongly disagree; 7 = strongly agree), participants responded to items such as “An employee may need to lie to a supervisor/manager to protect the company.” These items assessed responses to hypothetical situations in the workplace that were ethically ambiguous. They also completed the questionnaire a second time, indicating how they thought their supervisor would respond to each of the items ($\alpha = .94$).

**Family ethics.** Participants completed a 9-item family ethics scale adapted from the Workplace Ethics Scale (we replaced “supervisor” with “parent” and “employee” with “child; $\alpha = .85$). On a 7-point scale (1 = strongly disagree; 7 = strongly agree), participants responded to items such as “There is nothing wrong with a parent asking a child to lie about something important.” They also completed the questionnaire a second time, indicating how they thought their supervisor would respond to each of the items ($\alpha = .92$).

**Manipulation checks.** Participants completed four manipulation check questions. On a 7-point scale (1 = not at all; 7 = very much), participants reported the extent to which they interacted with their supervisor inside and outside of the workplace (“How much do you interact with your supervisor in the work setting?” and “How much do you interact with your supervisor outside of work?”) and their confidence in their ratings of their supervisor’s workplace and family ethics (“How confident are you that you know your supervisor’s attitudes about the issue above?”; question completed for both work ethics and family ethics).

**Results**
**Preliminary analyses.** We first examined the degree to which participants interacted with their supervisor to ensure that they were thinking of a supervisor with whom they interacted frequently at work but rarely outside of work. Participants reported that they interacted with their supervisors frequently at work \((M = 5.32, SD = 1.53; 1 = \text{not at all}; 7 = \text{very much})\), but infrequently outside of work \((M = 1.80, SD = 1.42)\). We also examined participants’ confidence in their ratings of their supervisor’s workplace and family ethics. Participants expressed confidence in their estimates of both supervisor workplace ethics \((M = 5.25, SD = 1.44; 1 = \text{not at all}; 7 = \text{very much})\) and supervisor family ethics \((M = 4.51, SD = 1.67)\), and participant estimates of supervisor workplace and family ethics were significantly correlated, \(r(177) = .67, p < .001\). Similar percentages of participants rated themselves as more (38.90%) and less (46.70%) unethical than their supervisors, and no differences between these groups emerged. We also conducted a series of \(t\)-tests to examine whether there were any sex differences. While the mean level of job satisfaction reported by women \((M = 3.91, SD = 0.86)\) was marginally higher than the level reported by men \((M = 3.68, SD = 0.89)\), women and men did not significantly differ on job satisfaction or job tension \((ps = .08 \text{ and } .93, \text{ respectively})\). However, women \((M = 5.00, SD = 1.31)\) reported significantly greater organizational commitment than men \((M = 4.46, SD = 1.45)\), \(t(183) = -2.61, p = .01, d = -0.39\).

**Measurement model.** We used full information maximum likelihood estimation in the SEM software MPlus 6.12 (Muthén & Muthén, 1998-2011) to identify a measurement model and examine a structural equation model. The data for the confirmatory factor analysis (CFA) came from nine items measuring organizational commitment, seven items measuring job satisfaction, and seven items measuring job tension. We parceled items from each scale to create three parcels for each construct. We performed a confirmatory factor analysis expecting a three-factor model.
Model fit indices revealed that the initial model demonstrated acceptable fit, $\chi^2(24, n = 185) = 67.90, p < .001$, RMSEA = 0.10 (0.072, 0.128), CFI = .96, TLI = .95, SRMR = .07. All items significantly loaded onto the latent construct that they were designed to measure.

**Structural equation model.** We conducted a SEM in which indirect effects were examined using 95% confidence intervals from a bias-corrected bootstrap with 5,000 replications. We included the latent constructs of job tension, job satisfaction, and organizational commitment from the CFA model, and added observed measures of supervisor attitudinal dissimilarity (discrepancy between participant and supervisor scores) in workplace ethics and supervisor attitudinal dissimilarity in family ethics. The model (see Figure 2) demonstrated acceptable fit, $\chi^2(41, n = 177) = 97.12, p < .001$, RMSEA = .08 (0.065, .11), CFI = .95, TLI = .94, SRMR = .09. A correlation matrix of the relationships among the constructs is presented in Table 1.

Consistent with our predictions, attitudinal dissimilarity in workplace ethics between participants and supervisors significantly predicted job tension, standardized coefficient = .44, $p < .001$, but attitudinal dissimilarity in family ethics did not significantly predict job tension, standardized coefficient = -.06, $p = .59$ (Hypothesis 1). Job tension significantly negatively predicted job satisfaction, standardized coefficient = -.38, $p < .001$; and job satisfaction significantly predicted organizational commitment, standardized coefficient = .85, $p < .001$. Most importantly, attitudinal dissimilarity in workplace ethics between participants and supervisors had a significant indirect effect on organizational commitment, through job tension and job satisfaction, coefficient = -.14, 95% CI = -0.34 to -0.04 (Hypothesis 2). As expected, there was not a similar indirect effect of attitudinal dissimilarity in family ethics between
participants and supervisors on organizational commitment, coefficient = .02, 95% CI = -0.08 to 0.14.  

**Discussion Experiment 2**

Experiment 2 extended Experiment 1 by examining actual ongoing self-supervisor relationships and assessing workplace outcomes that may be associated with job tension. The results of Experiment 2 provided a conceptual replication of the initial findings from Experiment 1 that attitudinal dissimilarity has differential effects depending on whether attitudinal dissimilarity is in a relationship-relevant domain (vs. non-relationship-relevant domain; Hypothesis 1). Moreover, Experiment 2 revealed that imbalance-induced tension associated with relationship-relevant (but not non-relationship-relevant) dissimilarity of attitudes tends to be accompanied by other negative outcomes (i.e., lower job satisfaction and organizational commitment; Hypothesis 2).

**General Discussion**

We examined the relationship of self-supervisor attitudinal dissimilarity with individuals’ job tension and work outcomes, examining whether attitudinal dissimilarity in relationship-relevant issues had a greater effect than attitudinal dissimilarity in non-relationship-relevant issues. Using a between-participants design, Experiment 1 provided initial evidence that attitudinal dissimilarity in a work relationship may have greater repercussions when attitudes are relationship relevant (i.e., a workplace ethical dilemma) than non-relationship relevant (i.e., a non-workplace ethical dilemma). Using a within-participant design and different sample population, Experiment 2 replicated the relations of Experiment 1 in ongoing employee-supervisor relationships. Importantly, Experiment 2 demonstrated that attitudinal dissimilarity about relationship-relevant attitudes (i.e., job ethics), but not non-relationship-relevant attitudes
(i.e., family ethics), was associated with lower organizational commitment through increased job tension and decreased job satisfaction. Thus, disagreement with a supervisor on relationship-relevant issues predicts more negative individual outcomes.

The present research applied and extended extant work in two important areas. First, the research provided the first evidence for a refinement of balance theory predictions by demonstrating that individuals experience greater tension resulting from attitudinal dissimilarity in a domain relevant to the relationship of the disagreeing parties. When attitudinal dissimilarity with a supervisor was relationship-relevant (vs. non-relationship-relevant), individuals reported greater job tension, which was associated with less job satisfaction and, in turn, less organizational commitment. Balance theory suggests that tension arises when triadic relations are imbalanced (e.g., a disagreement exists between $p$ and $o$ about $x$; Heider, 1958). The present research highlights the importance of not just considering whether a disagreement between two parties exists, but also considering whether the disagreement is relevant to the relationship.

Second, the present research provided a novel application of balance theory predictions to the employee-supervisor relationship. Disagreements in ongoing relationships results in tension (Heider, 1958). In the context of workplace relationships, the present research highlights the mediating role of job tension in the link between attitudinal dissimilarity and workplace outcomes. Previous research found a correlation between employee perceptions of supervisor ethical behavior and job satisfaction and suggested balance theory as a possible mechanism for this relationship. However, the research did not test for a presence of dissonance, discomfort, or tension (Viswesvaran & Deshpande, 1996). Additional past research in the context of work relationships demonstrated relationships between employee and supervisor agreement in job autonomy and family with job satisfaction and characterized job satisfaction as a proxy for the
pleasantness of a balanced state. Our research specifically tested for tension that balance theory suggests should arise from interpersonal disagreement, and we examined the tension in the context of disagreements that were relationship-relevant and non-relationship-relevant. For relationship-relevant attitudes, participant reports of greater attitudinal dissimilarity-induced job tension were associated with lower job satisfaction and, in turn, lower organizational commitment. When tension occurs in non-voluntary relationships, individuals can reduce tension by creating psychological distance (e.g., by reducing perceptions of interdependence; Hess, 2000). Low levels of organizational commitment could be a reflection of using psychological distance from the supervisor to reduce imbalance-induced tension.

**Applications and Future Directions**

The present research highlights when relationships may be most at risk of disagreement-induced tension and possible dissolution. In the present research, tension arose and predicted lower job satisfaction and lower organizational commitment when disagreements concerned relationship-relevant (vs. non-relationship-relevant) issues. This finding has implications for the claim in the ethical leadership literature that it is important for leaders to conduct their personal lives in an ethical manner (Brown, Treviño, & Harrison, 2005). According to our results, whether supervisors behave ethically in their personal lives may not influence their employee relationships provided that the supervisors and employees agree about work ethics. In a similar extension, issue relevance may explain how politicians can maintain relationships with constituents and be reelected after unethical personal behavior (e.g., infidelity, sending inappropriate photos on social media). An understanding of issue relevance may also inform relationships outside of a leadership context. For example, individuals could have a negative attitude about infidelity yet remain close friends with someone who is unfaithful to a partner.
because it does not affect their interactions with the friend. In short, individuals may be unlikely to experience tension when imbalance occurs and their relationship can continue without discomfort as long as the imbalance occurs on an issue that is not relevant to the relationship, and future research should examine whether the relevance of the issue to the relationship extends to other relationship types.

The present research focused on the outcomes of job satisfaction and organizational commitment, but future research could examine additional outcomes such as employee behavior (e.g., organizational citizenship behaviors, workplace deviance) and job retention. Previous research demonstrated greater turnover rates as a result of declines in commitment following increased costs, decreased rewards, and increased alternatives (Rusbult & Farrell, 1983) and as a result of decreased job satisfaction following decreased organizational commitment (de Moura, Abrams, Retter, Gunnarsdottir, & Ando, 2009). Whether these negative outcomes for individuals could potentially extend beyond the workplace setting should also be examined, because there is significant overlap between job and life satisfaction (Tait, Padgett, & Baldwin, 1989). Relatedly, Experiment 2 was limited in that only part-time employees were sampled. It is possible that effects demonstrated in our research as well as other downstream outcomes may be more pronounced among full-time employees, who spend more time at places of employment.

Two other areas for future work are related to the measurement of self-supervisor attitudinal dissimilarity. First, we focused on ethical attitudes. While the use of ethical attitudes among a sample of employees provided a strong test of our hypotheses, it was, arguably, a safe approach to examine relationship-relevant versus non-relationship-relevant ethical attitudes; for instance, a supervisor’s attitudes on other topics, such as politics, may still carry some relevance in or overlap with the workplace setting. Future research could examine other types of attitudes.
Second, in Experiment 2 participants’ attitudes were compared to their perception of their supervisor’s attitudes rather than their supervisor’s actual attitudes. A meta-analysis found that actual similarity was predictive of attraction after no contact or brief contact, but that perceived similarity was predictive of attraction in no contact and brief contact situations as well as ongoing relationships (Montoya et al., 2008). Similar findings in the management literature demonstrate that perceived similarity in self-supervisor relationships are more predictive of individual outcomes than actual similarity (Turban & Jones, 1988). Thus, we suspect that future studies would demonstrate that perceptions of supervisor attitudes would have a greater impact on individuals’ outcomes compared to actual supervisor attitudes. For instance, if individuals incorrectly believe that they are more dissimilar to a supervisor than they actually are, the perception would likely result in tension.

The present research could serve as a foundation for additional examination of effects of relevance of issue to the relationship in the context of attitudinal dissimilarity within close relationships. One intriguing question is whether the link between relevance to the relationship and imbalance-induced tension operates more strongly within certain types of relationships. It seems possible that within employee-supervisor there may be a relatively clear line between what is and is not relevant to the relationship, whereas in relationships characterized by greater breadth of interdependence (e.g., friendships, romantic partnerships), the line of relevance of issue to the relationship may be more blurred. Though it seems quite likely that spousal disagreement about division of household labor and childrearing could cause tension, their attitudes about work and politics may also influence the level of tension they experience in their relationship. Among highly interdependent partners, individuals may reduce imbalance-induced tension by reducing their perceptions of an issue’s relevance to their relationship (e.g., couples
who support different political parties agreeing that their political attitudes are not part of the foundation of their relationship). Previous research on self-evaluation maintenance has demonstrated that individuals can protect the self by reducing the perceived importance of a task for self-definition when they are threatened with a relative failure (Tesser & Campbell, 1980). Individuals may behave similarly in relationships by reducing perceived issue relevance in defining the relationship when the relationship is threatened by disagreement.

**Conclusion**

In a novel extension and application of balance theory, two experiments examined the effects of attitudinal dissimilarity with a supervisor in attitudes about relationship-relevant (vs. non-relationship-relevant) ethics. Our findings indicate that not all attitudinal dissimilarity yields negative repercussions. Only relationship-relevant attitudinal dissimilarity as opposed to non-relationship-relevant attitudinal dissimilarity was a catalyst for tension in the workplace and, in turn, lower job satisfaction and organizational commitment. We hope that the current research provides fertile ground from which future work can explore methods of reducing tension and subsequent negative outcomes of relationship-relevant attitudinal dissimilarity.
References


10.1037/h0045531.


Footnotes

1 We again examined the model with the inclusion of sex to test for any possible interaction
between sex and our two independent variables. Sex was not related to job tension on its own (\(p
= .86\)) or in interaction with our independent variables (\(ps\) ranged from .07 to .30).

2 To ensure that the relative direction of dissimilarity between individuals and supervisors was
not an issue in our research, we examined the participants’ reports of their perceived ethics
compared to their perception of their supervisors’ ethics. On the workplace ethics scale,
participants rated themselves as being only marginally less unethical than they rated the
supervisor, but this difference was not significant, \(t(179) = -1.74, p = .08, d = -0.26\). Compared to
their ratings of the supervisor, 38.90%, 14.40%, and 46.70% of participants rated themselves as
being more unethical, equally unethical, and less unethical, respectively. Importantly, no
significant differences emerged in level of perceived job tension among participants who
reported being more unethical, less unethical, or equally ethical to their supervisors, \(F(2, 176) =
1.41, p = .25, \eta_p^2 = .02\). On the family ethics scale, participants rated themselves as being only
marginally less unethical than they rated the supervisor, but this difference was not significant,
\(t(179) = -1.85, p = .07, d = -0.28\). Compared to their ratings of the supervisor, 42.20% rated
themselves as being more unethical, 7.80% rated themselves as being equally ethical, and 50%
rated themselves as being less unethical. There were no significant differences in level of
perceived job tension among participants who reported being more unethical, less unethical, or
equally ethical to their supervisors, \(F(2, 176) = 0.15, p = .86, \eta_p^2 = .00\). These findings indicate
that our results are not merely a product of participants perceiving their supervisors as unethical.

3 We created parcels using the item-to-construct balancing technique, which pairs items
possessing higher standardized factor loadings with items possessing lower standardized factor
loadings. Utilizing parcels requires fewer model parameter estimates, increases the reliability of the indicators, and reduces sampling error (Little, Cunningham, Shahar, & Widaman, 2002).

4 We used difference scores because our research concerns dissimilarity between individuals and supervisors, and does not concern the relative direction of those differences nor does it concern change within the individual participant. Research has suggested that concern about the use of difference scores is often erroneously expressed irrespective of data analysis approach (Thomas & Zumbo, 2012) and that difference scores may even be preferred under certain circumstances (Kisbu-Sakarya, MacKinnon, & Aiken, 2012). Researchers concluded that the use of difference scores is appropriate when relevant to the subject matter and the analysis has enough power (Thomas & Zumbo, 2012). Our adequately powered analysis tests research questions that are primarily concerned with the relative distance between two individuals on a construct (self vs. supervisor workplace ethics and self vs. supervisor family ethics). The use of difference scores allows an appropriate and most direct method of examining our research questions.

5 We examined the same model, but included the variables of sex to control for its relationship with organizational commitment. Model fit was acceptable, $\chi^2 (49, n = 177) = 107.49, p < .001, \text{RMSEA} = .082_{(.061, .103)}, \text{CFI} = .95, \text{TLI} = .94, \text{SRMR} = .09$. Sex significantly predicted organizational commitment, standardized coefficient = .11, $p = .03$. The patterns of significance and direction for all other direct and indirect paths from the original model remained the same. Thus, we chose to retain our original hypothesized model.
Table 1. Means, Standard Deviations, and Correlations among Experiment 2 Constructs.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Job Tension</td>
<td>2.60 (1.13)</td>
<td>---</td>
<td></td>
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<tr>
<td>2. Job Satisfaction</td>
<td>3.82 (0.87)</td>
<td>-.44***</td>
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<tr>
<td>3. Organizational Commitment</td>
<td>4.79 (1.39)</td>
<td>-.28***</td>
<td>.86***</td>
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<td></td>
</tr>
<tr>
<td>4. Self-Supervisor Relationship-Relevant Dissimilarity</td>
<td>1.02 (1.23)</td>
<td>.36***</td>
<td>-.36***</td>
<td>-.28***</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>5. Self-Supervisor Non-Relationship-Relevant Dissimilarity</td>
<td>0.92 (0.98)</td>
<td>.23**</td>
<td>-.25**</td>
<td>-.22**</td>
<td>.59***</td>
<td>---</td>
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</table>

*Note. * *p < .05, **p < .01, ***p < .001.*
Figure 1. Experiment 1 job tension as a function of supervisor similarity and issue relevance.

Error bars represent the standard error for each group.

Figure 2. Experiment 2 structural equation model. Coefficients are standardized. Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Workplace ethics were considered relationship-relevant; family ethics were considered non-relationship-relevant.