The Trouble with "Shoulds": Interpersonal Meaning Violation and Workplace Wellbeing

Josh Hodge 0000-0003-3853-1379

Faculty of Business and Economics

Department of Management

Submitted in total fulfilment of the requirements of the degree of

Doctor of Philosophy

February 2021

Abstract

A person's sense of meaning can be violated in vivid ways, like dealing with a cancer diagnosis, or in small ways, like being treated contrary to how they feel they should be treated. Interpersonal interactions provide a lot of opportunities for these small meaning violations. This dissertation focuses on interpersonal meaning violations in two research phases: first, a scale development, and second, an application of the interpersonal meaning violation construct to workplace conflict. In the scale development phase I draw on nine separate data collections, involving 1,490 people, in which I develop and validate the scale items, test their psychometric properties, demonstrate the convergent and discriminant validity, and establish a nascent nomological net. In the workplace conflict phase I use two experiments and a 10-day experience sampling survey (a total of 1,381 participants spread across the three data collection efforts) to contrast interpersonal meaning violation with a prominent conflict paradigm and demonstrate that interpersonal meaning violation is essential for understanding how conflict affects workplace wellbeing.

Declaration

i. This thesis comprises only my original work toward the Doctor of Philosophy except where indicated in the preface.

ii. Due acknowledgement has been made in the text to all other material used.

iii. This thesis is fewer than 100,000 words in length.

Preface

This thesis contains my original research which was completed during my enrollment at the University of Melbourne. I am responsible for the execution of all the works in this thesis, I received guidance, advice, and proofreading assistance from my supervisory team Karen Jehn and Jennifer R. Overbeck. I also received guidance and advice from Frank de Wit when developing Chapter 3. Chapters 1 and 4 are unpublished material that has not been submitted for publication. Chapter 2 has been submitted for publication at the Journal of Applied Psychology in December 2020. Chapter 3 is in revision following peer review by Organizational Behavior and Human Decision Processes.

This research was supported by an Australian Government Research Training Program (RTP) Scholarship.

Acknowledgments

I would like to acknowledge how very privileged I am to know all the people who have helped me through the PhD journey. Firstly, Alysha, for being my best buddy, someone who always says “you can do it” and is there to play when I need time out. And for being willing to marry me in the middle of a PhD. Thanks to Etty Jehn and Jen Overbeck, for being the best, most supportive supervisors, anyone could ever wish for. Jen and Etty have always been patient and kind. They are both world-class scholars and deserve much more praise than I have writing skills to give.

Thanks to my mum and dad. Mum, for bringing me into the world, for believing that a child with dyslexia could learn to love books, and for spending hours and hours patently reminding me the difference between the letter B and the letter D for the hundredth time. Dad, for always teaching, for pointing out that there are principles and thinking frameworks from which the world can be understood. For (when I was only fourteen years old) lending me his Earl Nightingale tape-sets on how to be a more effective manager.

Thanks to my brother Brad. He’s always been an example of diligence and completed his PhD in the allotted time, without extensions. He’s always been willing to talk about psychological theories or academic politics.

Thanks to John, you first got me thinking about “shoulds” and you have been a great friend. I will be forever thankful that you enjoyed Phaic Tăn otherwise I might not have had the privilege of your friendship all these years.

Thanks to Frank de Wit for his constant support, for challenging my understanding of the theory, for teaching me how to be fastidious about experiment design, and for making sure that I can explain why I think what I think. Thanks to Saïd for his insightful suggestions

on the research design and ideas. And for pointing out how one little word can change the interpretation of a vignette.

Thanks to Jay, for always being available to celebrate a good result, toast the launch of a new experiment, or commiserate a hard time. Thanks to Reb, for suggesting I use an experience sampling method, and for a bunch of other terrific suggestions and for getting me thinking. Thanks to Ed, for being encouraging and providing perspective by reminding me that very few people have died from doing a PhD. Thanks to the level nine gang for toasting my experiments and making the office worth visiting.

Thanks to the groups which I have been privileged to participate in: the Power Status and Hierarchy lab group, the Experimentalist Lunchtime Crew/Melbourne Organizational Behavior Group, and the Social Psychology Journal Club. Thanks for introducing me to new ideas, helping me to see my work from a different perspective and widening the scope of my experience of academia.

Thanks to Dorothy. In the last part of my PhD journey when things could have been especially grim you kept me warm and dry and helped me to see amazing new things. I don’t mind that you are slow going up hills, I still love you. Thanks to Woppy for being a fun and games kind of bear.

Finally, thanks to you, the reader, for taking the time to download this document. Throughout the PhD process I imagined someone reading a paper from this dissertation and finding it helpful. There is an exciting feeling when you find a theory or a method that is a perfect match for the thing you are trying to understand. That is the feeling I hope to one day allow someone else to experience from the work in this dissertation. Maybe that day is today, maybe that someone is you. If it is, thanks!

Table of Contents

Chapter 1: Introduction and Background 1

    Revisiting Conflict Type with an Interpersonal Meaning Violation Lens 5

Chapter 2: Trouble with "Shoulds": Development and Validation of the Interpersonal Meaning Violation Scale 9

        Shortcomings of Existing Measures 13

        The Importance of Differentiating the Source of IMV 15

        Validation Strategy 15

    Phase 1: Item Generation, Content Validity, Item Reduction 16

        Item Generation 16

        Sample 1: Content Validation 17

            Participants 17

            Procedure 18

            Measures 19

            Results and Discussion 19

        Sample 2: Item Reduction 20

            Participants 20

            Procedure 21

            Results and Discussion 21

    Phase 2: Psychometric Properties 24

        Sample 3: Psychometric Properties 25

            Participants 25

            Procedure 25

            Measures 26

            Results 26

Discussion 29

Phase 3: Convergent and Discriminant Validity..29

Sample 4: Convergent and Discriminant Validity....................................31

Participants..31

Procedure 32

Measures 32

Results..33

Phase 4: Criterion-Related Validity and Nomological Network 37

Sample 5: Nomological Network...38

Participants..41

Procedure 42

Measures 42

Results and Discussion 44

Sample 6: Criterion-Related Validity 47

Participants..48

Procedure 49

Measures 50

Results and Discussion 50

General Discussion 52

Limitations and Future Directions 53

Conclusion 57

Chapter 3: Now it’s Getting Personal: Comparing Effects of Meaning Violation and Conflict Type on Workplace Wellbeing..58

Taking Conflict Personally 62

The Role of Meaning 64

        Revisiting Conflict Type with a Meaning Lens..65

    Overview of Studies..72

    Study 1: Belonging Meaning Violation..72

        Methods...73

            Participants...73

            Procedure...73

            Measures..74

        Results..75

        Discussion...76

    Study 2: Social Norm Meaning Violation...77

        Methods...77

            Participants and Procedure...77

        Results..78

        Discussion...79

    Study 3: Experience Sampling Field Study...79

        Methods...80

            Participants...80

            Procedure...80

        Results..81

    General Discussion...84

        Practical Implications...86

        Limitations and Future Directions..87

        Conclusion...88

Chapter 4: Thesis General Discussion..90

    Contribution..90

Implications....................93

    Implications for Theory....................93

    Implications for Individuals....................94

Limitations....................98

Future directions....................98

Conclusion....................103

Appendix....................104

List of Tables

Table 1. Overview of Methods and Contributions of Studies..8

Table 2. Results of Exploratory Factor Analysis 23

Table 3. Descriptive Statistics, Zero Order Correlations, and Alphas for Sample 3 26

Table 4. Descriptive Statistics, Zero Order Correlations, and Alphas for Sample 4 34

Table 5. Descriptive Statistics, Zero Order Correlations, and Alphas for Sample 5 45

Table 6. Means and Standard Deviations of Workplace Wellbeing and Taking Conflict Personally by Condition 75

Table 7. Results of Multilevel Path Model 82

Table 8. Indirect Effects of Conflict on Wellbeing via Meaning Violation and Taking Conflict Personally 83

List of Figures

Figure 1. Method effect confounded model....................28

Figure 2. Interpersonal meaning violation as a mediator of the effects of ostracism on general negative emotions, sadness, and hostility....................52

Figure 3. Theoretical serial mediation model....................70

Figure 4. Path model of serial mediation of conflict, meaning violation, taking conflict personally, and workplace wellbeing....................84

Chapter 1: Introduction and Background

Piaget (1929) theorized that we hold a prototype world in our mind about how the world should be, which he called a "schema." Further, he posited, an inconsistency between one's experience and one's schema causes "disequilibrium." Festinger developed a theory that had strong parallels with Piaget's. Festinger (1954) proposed that holding two inconsistent ideas in mind causes an unpleasant drive state called "cognitive dissonance." Bringing together these theories, and other theories of cognitive consistency, the meaning maintenance model (Heine et al., 2006) suggests that this disequilibrium or cognitive dissonance is caused by a mismatch between our sense of how the world should be and our experience. In this dissertation, I assert that this mismatch is a crucial issue that has not received sufficient attention from workplace scholars. Negative workplace occurrences such as ostracism, conflict, bullying, and abusive supervision significantly affect the wellbeing of people at work and have predominantly been studied in separate silos. I argue that these negative occurrences can be understood in a unified manner by examining how they create a mismatch between the perceiver's sense of how the world should be and their experience. I seek to demonstrate that these mismatches affect a wide range of important workplace outcomes such as stress, rumination, psychological withdrawal, emotional exhaustion, work engagement, job satisfaction, coworker satisfaction, organizational commitment, and turnover intentions.

I think of it like this: when something rolls off the table, whether it is an apple or an egg, gravity is why it hits the floor. Perhaps different techniques are used to stop different things rolling off the table; however a good physicist acknowledges that gravity is the common cause of falling. I suggest a great deal of negative workplace occurrences (such as bullying, ostracism, and abusive supervision) create harm by a common cause: a mismatch between a person's sense of how the world should be and their experience. Furthermore, even workplace occurrences that many would consider benign will cause harm if they mismatch with a person's sense of how the world should be. If, as I propose, this phenomenon of mismatch causes a great deal of the harm at work, it seems problematic that it has not received more attention. Furthermore, it presents a significant opportunity to expand and unify the body of knowledge and position future research to improve the lives of individuals. To that end, in this dissertation, I consider the mismatch between meaning and experience through the lens of a rich body of theory that has not generally been applied to interpersonal processes, develop a new tool for measuring the mismatch, and test whether the mismatch is largely what causes workplace occurrences to harm wellbeing.

One of the most prominent theories that deals with how people process mismatches between thoughts is cognitive dissonance theory (Festinger, 1962). Although cognitive dissonance is prominent; as a theoretical framing it was not the optimal theory for this research, because the bulk of cognitive dissonance work focused on attitude change (Cooper, 2007). For example, participants induced to lie to another participant about how interesting a boring experimental task is later report finding the task more interesting (Festinger & Carlsmith, 1959). However, the last three chapters in the classic book (Festinger, 1962) that launched over 50 years of cognitive dissonance research (Cooper, 2007), suggest that a key source of dissonant cognitions is other people. Festinger said "The knowledge that some other person, generally like oneself, holds one opinion is dissonant with holding a contrary opinion" (Festinger, 1962, p. 261). Dissonance researchers largely overlooked Festinger's challenge to explore the role of dissonance in social processes (Cooper, 2007). However, another theory extended Festinger's model, included social processes, and provided additional insights that would allow a better understanding of the mismatch that, I argue, drives harmful outcomes at work. This theory was the meaning maintenance model.

The meaning maintenance model extends Festinger's dissonance theory and marries it with Piaget's work (Proulx & Inzlicht, 2012a) to show that, when someone experiences a mismatch between how they feel the world should be and the experience they are having, they experience an unpleasant state. It is as if each person has a map of how the world should be and when the territory does not match the map, alarm bells start ringing. In the meaning maintenance model, this map is called a *meaning framework* (Proulx & Inzlicht, 2012a). Although meaning frameworks may contain elements of expectancy, they are not the same thing. For example, Josephine may fully expect her boss to get drunk at the Christmas party, because he does so every year. However, if she believes bosses should remain sober at work functions, she will experience meaning violation even though she expected the drunkenness. It is the mismatch between our "shoulds" (meaning) and reality (experience) that causes an unpleasant and aversive state[1].

Between individuals, meaning frameworks can vary a great deal. For example, servers at Dick's Last Resort, a restaurant chain, are trained to be insulting and abrasive (Miner et al., 2018). Customers choose the restaurant deliberately for this experience. However, the occasional appearance of a Tripadvisor 1-star review suggests that sometimes people experience a mismatch between how they feel they should be treated at a restaurant and how these servers act.

---

[1] I differentiate between expectations about how the world "should" be and *"The Tyranny of the Should"* (Horney, 1950). The tyranny of the should, as popularised by early proponents of cognitive behavioural therapy Albert Ellis and Aaron Beck, focuses largely on the "shoulds" that one has for oneself; e.g., "I should be a perfect husband," "I should always be brave." Conversely, this dissertation focuses on "shoulds" that one has for others; e.g., "he should be polite to me," "they should include me in their group."

Thus, drawing on the meaning maintenance model, I refer to interactions that cause a mismatch between a person's sense of how the world should be (their meaning framework) and their experience as *interpersonal meaning violation*. In Chapter 2, I define interpersonal meaning violation more formally as "an individual construal event in which an encountered stimulus (specifically involving another person or persons) is inconsistent with a meaning framework defining 'how others should be.' This stimulus may involve the person's observable behaviors, such as actions, facial expressions, and written or verbal communications, or unobservable (or difficult to observe) features such as inferences about the other's thoughts, attitudes, motivations, or beliefs" (p. 11).

Despite an extensive search, I could not find a suitable, validated, existing measure of interpersonal meaning violation. Hence, I sought to develop and validate a measure. As described in Chapter 2, I followed best practices (Colquitt et al., 2019; Hinkin, 1998, 2005) to develop a multi-step process to create a substantively valid measure of interpersonal meaning violation. In Phase 1, I generated a pool of 132 items, reduced the number of items to a more workable number, and validated the content of the items. Phase 1 produced a 16-item scale, which I then tested in the subsequent phases. In Phase 2, I tested the psychometric properties of the 16-item measure. I assessed the factor structure, reliability, gender invariance, and susceptibility to methodological factors. In Phase 3, I assessed the convergent and discriminant validity of the scale, demonstrating that it was related to but distinct from bullying, abusive supervision, psychological safety, and social support. In Phase 4, I established a nascent nomological net using an experimental study and a multiwave, multisource data collection. This demonstrated that the interpersonal meaning violation scale has the expected theory-driven relations with ostracism, negative emotions, stress, rumination, psychological withdrawal, organizational citizenship behaviors, work engagement, satisfaction, and emotional exhaustion. For the scale development in Chapter 2, I ran a total of six separate data collections, involving 1,250 people. Although the primary objective of Chapter 2 was to create a valid and reliable scale, in the pursuit of criterion-related validity, I also ran an experiment to test my assertion that interpersonal meaning violation is the key driver of whether negative workplace occurrences cause harm. It is well established that ostracism causes negative emotions compared with inclusion (Hartgerink et al., 2015). Thus, I sought to test whether interpersonal meaning violation mediates the relationship between ostracism and negative emotions. The results of the experiment were informative, and the scale development process helped to confirm my arguments; yet I wanted to more thoroughly test my argument that workplace occurrences *may or may not* cause negative outcomes, depending on whether they cause meaning violation. To that end, I focused on a workplace occurrence that may be viewed as negative but that theory states can be benign or even positive: interpersonal conflict.

Revisiting Conflict Type with an Interpersonal Meaning Violation Lens

"...on the one hand, conflict improves decision quality; on the other, it may weaken the ability of the group to work together." (Schweiger et al., 1989, p. 67)

Interpersonal conflict presented an excellent testing ground for my theory that interpersonal meaning violation is the key thing that drives whether a workplace occurrence produces negative outcomes. Furthermore, because conflict can have a significant effect on workplace wellbeing (Greer & Jehn, 2007; Jehn et al., 2008) revisiting conflict theory through an interpersonal meaning violation lens could provide insights that would improve the lives of workers in the future. The dominant paradigm in conflict research has focused on *conflict type* (Jehn, 2014) which classifies conflict based on what the conflict is about: task conflict, relationship conflict, process conflict, and status conflict. Despite the intuitive appeal of this approach, meta-analytic analyses using the conflict type paradigm suggest that conflict type does not fully predict the effects of conflict (De Dreu & Weingart, 2003; de Wit et al., 2012; O'Neill et al., 2013). Although Greer and Jehn (2007) demonstrated that negative emotions play an important role in what makes conflict helpful or harmful, I felt that a deeper examination of the processes was in order. I theorized that negative emotions were not the cause of what made conflict helpful or harmful, but rather, negative emotions were indicators of an underlying psychological process that had not previously been explored. Although it seemed reasonable that the presence of emotions could make communication more difficult, it did not seem a sufficient explanation for why negative emotions had such a significant effect on conflict outcomes. Rather, I suspected that negative emotions were an indicator of the underlying interpersonal meaning violation that can occur in conflict. Thus, rather than focusing on emotions as previous work did, I focused on the underlying driver of what makes conflict harmful: interpersonal meaning violation.

I propose that interpersonal meaning violations are more predictive of workplace wellbeing than is any conflict type, and that interpersonal meaning violations can occur in the context of any type of conflict. I provide evidence of this in Chapter 3 with three studies. In Study 1, I used vignettes to manipulate conflict type and interpersonal meaning violation independently. The vignettes in Study 1 centered on violations of belonging. In Study 2, I used a similar design, but rather than manipulating expectations of belonging, I manipulated interpersonal meaning violations regarding social norms. Finally, in Study 3, I tested whether my predictions were supported among participants in real workplaces with an experience sampling study. Participants completed measures twice daily for 10 days. These two experiments and experience sampling survey comprised a total of 1,381 participants.

Finally, in Chapter 4, I conclude with a general discussion of what the overall findings suggest, the contributions of this thesis to theory and practice, the limitations of the present research, and future directions. See Table 1 for an outline of the methods and contributions of the studies in each chapter. Because each of my main chapters is based on a paper that has been submitted for publication, each contains a discussion of the literature that is pertinent to that chapter.

The two empirical chapters (Chapter 2 and 3) in this dissertation are related in that they both posit that interpersonal meaning violation is the key driver of outcomes at work. With this in mind, this thesis is intended to develop a research platform that could result in knowledge that will alleviate suffering for people at work. It highlights the importance of interpersonal meaning violation across a variety of important workplace constructs. Although both empirical chapters rely on rigorous modern research techniques, the central thesis echoes from over 2,000 years ago, when Epictetus wrote that people “are disturbed not by things, but by the view which they take of them” (Epictetus, 101/1955, p. 8).

Table 1

Overview of Methods and Contributions of Studies

Chapter	Approach	Main findings
1.	**Introduction and Background**	
2.	**Sample 1: Content Validation** Card sort (*n* = 109). Participants sort items into boxes that best match the definition provided.	● Reduced scale items from 36 to 32 ● Demonstrated that the remaining items showed sound content validity.
	Sample 2: Psychometric Properties Survey using 32 item version of the interpersonal meaning violation scale (IMVS) (*n* = 353). Exploratory factor analysis.	● Reduced scale from 32 to 16 items ● Scale shows a sound factor structure
	Sample 3: Psychometric Properties Survey using the final 16 item IMVS, impression management, and PANAS (*n* = 190). Confirmatory factor analysis, reliability, method effects, gender invariance analysis.	● Sound factor structure ● Good reliability ● Limited method effects of affectivity and impression management ● Invariant across genders
	Sample 4: Convergent and Discriminant Validity Survey with IMVS, abusive supervision, bullying, psychological safety, and social support (*n* = 132). Convergent and discriminant validity	● The IMVS has an expected level of conversion with abusive supervision, bullying, psychological safety, and social support. ● The IMVS demonstrates sound discriminant validity from abusive supervision, bullying, psychological safety, and social support.
	Sample 5: Criterion-related Validity Experimental study using CyberBall paradigm (*n* = 98), ostracism, IMVS, and negative emotions.	● The IMVS fully explains the relationship between ostracism (vs inclusion) and negative emotions in the CyberBall paradigm. ● Participants who felt ostracism was meaning violating experienced greater negative emotions, while those who experienced ostracism but did not find it meaning violating did not experience a change in their emotional state.
	Sample 6: Nomological Network Survey delivered in three waves. Wave 1: IMVS. Wave 2 (two day delay): stress, rumination, psychological withdrawal, organizational citizenship behaviors, work engagement, and job satisfaction. Wave 3 (third-party report by significant other): stress, emotional exhaustion, and job satisfaction (*n* = 164).	● The IMVS showed the expected relationships with 34 out of 35 hypothesised relationships. ● The IMVS is positively related to stress, rumination, psychological withdrawal, and emotional exhaustion ● The IMVS is negatively related to work engagement, job satisfaction, and organizational citizenship behavior.
3.	**Study 1: Belonging Meaning Violation** Vignette experiment (*n* = 1,096). 2 (belonging meaning violated, meaning maintained) ✕ 4 (TC, RC, PC, SC).	● Meaning violation moderates conflict's effects on DVs via taking conflict personally. ● When meaning violation is included in the model, conflict type is no longer predictive of DVs
	Study 2: Social Norm Meaning Violation Vignette experiment (*n* = 128). 2 (social norms (yogurt) meaning violated, meaning maintained) ✕ 1 (TC).	● Meaning violation is not just about respect. Spreading yogurt on your face is also a meaning violation. ● Meaning violation moderates conflict's effects on DVs via taking conflict personally. ● When meaning violation is included in the model, conflict type is no longer predictive of DVs
	Study 3: Experience Sampling Field Study Experience sampling study (*n* = 157). Daily measurement (afternoon and morning) for 10 days.	● The model still works in real workplaces with real people over time. ● Meaning violation moderates conflict's effects on DVs via taking conflict personally. ● When meaning violation is included in the model, conflict type is no longer predictive of DVs
4.	**General discussion and conclusion**	

Chapter 2: Trouble with "Shoulds":

Development and Validation of the Interpersonal Meaning Violation Scale

Abstract

A person's sense of meaning can be violated in vivid ways, like dealing with a cancer diagnosis, or in small ways, like being treated contrary to how they feel they should be treated. Interpersonal interactions provide many opportunities for such small meaning violations. This article outlines the development of a 16-item measure of interpersonal meaning violation (IMVS). Using six samples (including an experimental manipulation and multi-wave, multi-source data) the authors developed a scale with a unidimensional structure that has four potential sources of interpersonal meaning violation: coworkers, supervisors, employees, and customers. The scale showed appropriate content validity and sound psychometric properties (factor structure, reliability, gender invariance, and susceptibility to methodological factors). The scale possessed both convergent and discriminant validity and has strong associations with constructs in the nomological network of interpersonal meaning violation. Overall, this research shows that the IMVS is a reliable and valid measure and that interpersonal meaning violation has significant implications for important workplace constructs.

If you are distressed by anything external, the pain is not due to
the thing itself, but to your estimate of it
-Marcus Aurelius (Meditations)

If someone cuts you, your thoughts can significantly change how you feel about the event: If a surgeon cuts you, you thank her. If a thief cuts you, you feel terrible. The stimulus may be identical, but your thoughts change how you feel about it. The same is true for events at work. Many workplace events of particular interest to scholars are seen as aversive or dysfunctional--events such as abusive supervision, bullying or incivility, sexual harassment, or conflict (see, e.g., Hershcovis, 2011). However, whether a behavior is aversive or acceptable depends on the construal of the parties involved: Such behaviors may only be problematic if participants view them as negative. We contend that behaviors tend to be viewed as negative when they violate the perceiver's sense of how the world *should* be; to better understand why some workplace behaviors can be destructive or dysfunctional, it is useful to look beyond the immediate behavior and to the underlying *meaning violation* that drives construal. Workplace researchers have to this point lacked useful tools to measure this underlying sense of violation; we develop and validate a new scale to enable better research in this area.

Humans carry a set of expectations about how the world should be--what Heine, Proulx, and Vohs (2006) call the *meaning framework*. One's meaning framework defines normative expectations for phenomena. The extent to which something is inconsistent with this meaning framework is the extent to which one experiences meaning violation. A common source of meaning violation is other people (Festinger, 1962). That is, when someone acts in a manner that is inconsistent with a perceiver's beliefs about how people should behave, the perceiver experiences interpersonal meaning violation. Note that one's meaning framework is idiosyncratic and may not be aligned with broader societal norms. For example, if Professor Snargle thinks that people shouldn't be left-handed, then he will likely experience a sense of personal affront if he sees a student write with their left hand.

Though meaning violation can occur with regard to any stimulus, here we focus on *interpersonal* meaning violation. We define interpersonal meaning violation (IMV) as an individual construal event in which an encountered stimulus (specifically involving another person or persons) is inconsistent with a meaning framework defining "how others should be." This stimulus may involve the person's observable behaviors, such as actions, facial expressions, and written or verbal communications, or unobservable (or difficult to observe) features such as inferences about the other's thoughts, attitudes, motivations, or beliefs.

Interpersonal meaning violation is related to, but distinct from, expectancy violation. Perceivers may fully expect an outcome, but nonetheless see it as violating their sense of what should be. For example, Josephine, a lecturer, might *expect* to find her email inbox filled with student questions that are covered in the course outline document, because it happens every semester. However, if she believes that students *should* read the course outline, she will experience a meaning violation even though she expected the deluge of emails. Regardless of the affective valence associated with a given expectation, meaning violation creates an aversive arousal that is inherently unpleasant (Townsend et al., 2013). Violation occurs in cases of a mismatch between one's meaning framework and the stimulus one encounters--it is largely defined by the perceiver's construal.

Organizational research has called for efforts to better understand what causes harm when people experience workplace behaviors, such as incivility (Hershcovis, 2011) or interpersonal disagreements (Matz & Wood, 2005). Along these lines, in recent work, Aquino and colleagues (2014) have identified an extreme example by reconsidering the dynamics around sexual behaviors at work. Though many such behaviors reflect unacceptable behavior, Berdahl and Aquino (2009) have documented contexts in which all parties share a meaning framework around workplace sexual behaviors that casts them as playful and welcome. These authors suggested that the parties' construal of the behavior--the extent to which it supported or undermined consensus meaning frameworks for how colleagues should interact--was the key determinant of whether that behavior was regarded as pleasant or destructive. This speaks to the importance of developing tools that allow researchers to look more closely at construals of workplace experiences and behaviors that may be, but are not invariably, negative.

We propose that interpersonal meaning violation is key to better understanding these constructs. Some of the most influential research on the broader construct of meaning violation was conducted by cognitive dissonance researchers (Heine et al., 2006). A third of Festinger's (1962) groundbreaking book focused on the potential for research on interpersonal sources of meaning violation. Despite this beginning, little research has responded to Festinger's call for a specific focus on interpersonal relations (c.f. Hodge et al., 2020; Matz & Wood, 2005). This may be due, to a large extent, to the lack of reliable tools for measuring meaning violation in interpersonal relations. Our work helps to rectify this absence.

Shortcomings of Existing Measures

Existing measurement approaches show significant weaknesses which make them difficult to reliably use in interpersonal research. Affective states (whether measured by self-report or using facial electromyography) have been used as a proxy for meaning violation; however, this is somewhat problematic (Levy et al., 2018). Some studies (e.g., Elliot & Devine, 1994; Martinie et al., 2013) have shown that affect is correlated with meaning violation only if it is the first measure used and only if completed shortly after the meaning violating experience. Further, although meaning violation is a common cause of negative emotions, it is not the only cause of negative emotions. Thus, using negative emotions as a proxy for meaning violation is flawed because negative emotions that are identified could be from any number of potential sources of negative emotion, casting doubt on specific claims about the role of meaning violation.

Psychophysiological measures have also been used as an indicator of meaning violation, including cardiovascular measures such as those used in the biopsychosocial model of challenge and threat (Blascovich, 2013). However, these measures are expensive and time consuming to administer. Further, though many workplace experiences and behaviors that researchers want to study involve verbal interactions (e.g., interpersonal conflicts, uncivil comments, bullying, etc.), psychophysiological measurements taken during speech cannot be interpreted due to the artifacts that speech behavior has on the cardiovascular system (Blascovich et al., 2011). Functional magnetic resonance imaging (fMRI), with a focus on the anterior cingulate cortex, also shows a great deal of promise for better understanding the neurological origins of meaning violation; however, fMRI is very expensive and the equipment is prohibitive for measuring interpersonal interactions because participants' heads need to be inside the (large and noisy) fMRI machine to collect readings (Proulx & Inzlicht, 2012b). A more affordable, tractable measure is skin conductance; this, however, offers no way to differentiate between increases due to general arousal (such as if the participant is highly engaged or amused) and increases due to meaning violation, in particular (Proulx et al., 2012).

Perhaps most useful, to date, is Park and colleagues' (2016) global meaning violation scale, which assesses responses to significant meaning-violating events such as experiencing a hurricane or getting cancer. However, it falls short for workplace use in three ways. First, it assesses target events that are so significant and vivid that they are not clearly comparable to ordinary workplace interactions. Second, two of the factors in the scale focus on goal obstruction. Goal obstruction may cause meaning violation if the perceiver believes that their goal should not be obstructed. However, it is also possible for someone to believe that having their goal obstructed is normal and acceptable: something that they may need to work through or negotiate over, but not a meaning violation. Lastly, one of the items assumes that people believe in a god, potentially limiting generalizability across respondent populations. Two recent dissertations (Guan, 2019; Weisman, 2018) have attempted to adapt the global meaning violation scale for use with interpersonal meaning violations, pointing to the desirability of developing a psychometrically-validated interpersonal meaning violation scale (IMVS). However, the adaptations in these dissertations still focused on large, vivid changes in global meaning (e.g., "How much did the occurrence of this experience violate your sense that other forces have control in the world?"; "How much did the occurrence of this experience violate your sense that the world is a good and safe place?"). Furthermore, neither of the dissertations included scale validation efforts beyond the reporting of reliability. Thus, a measure for ordinary workplace experiences is still needed.

The Importance of Differentiating the Source of IMV

Rather than making the referent in our scale “someone at work,” we chose to define the specific source of potential interpersonal meaning violation: supervisors, coworkers, employees, or customers. It is well established that the frame of reference used to respond to a measure can affect the validity (Bing et al., 2004) and consistency (Lievens et al., 2008) of responses received. Further, measures lacking a specific referent (e.g., “someone at work”) are less predictive of outcomes than those that specifically identify the source of the behavior of interest (Caza & Cortina, 2007; Hershcovis & Reich, 2013; Lavelle et al., 2007). Thus, our measure identifies the potential sources of interpersonal meaning violation.

As noted above, the goal of this paper is to develop a brief, valid measure of interpersonal meaning violation suitable for use in workplaces (and other contexts that feature ordinary, everyday interactions--not particularly vivid or significant events), so as to enable deeper examination of the substrates of unpleasant, counterproductive workplace behaviors. We remedy the longstanding deficiency in tools to measure interpersonal meaning violation by developing a reliable and valid scale that assesses multiple potential workplace sources of interpersonal meaning violation: supervisors, coworkers, employees, and customers.

Validation Strategy

Following scale development best practices (Hinkin, 1998, 2005) we used a multistep process to validate our measure. In Phase 1, we generated items, validated content, and engaged in item reduction. In Phase 2, we tested the psychometric properties (factor structure, reliability, gender invariance, and susceptibility to methodological factors) of the resulting measure. In Phase 3, we assessed the convergent and discriminant validity of the scale. Finally, in Phase 4 we examined the nomological network using a time delay as well as reports from a third party.

Phase 1: Item Generation, Content Validity, Item Reduction

Item Generation

Items were generated using a deductive approach. We generated 132 initial items, which consisted of 33 item wordings applied to 4 different targets (supervisor, coworker, employee, customer; see online Supplement A[2]) based on the conceptual definition outlined earlier. Many existing scales *explicitly* reference treatment that probably results in meaning violation; however, we sought to create scale items that *imply* the participant's personally-held meaning framework (the way they believe they "should" be treated). For example, we hypothesized that for many people being left out of a ball-toss game would be meaning violating, yet some people would not mind. If we wrote the scale items with an explicit reference to the ball-toss ostracism we might write "I was ignored." However, this would not measure meaning violation specifically because, although many people may have a meaning framework that says they should not be ignored, this meaning framework is not shared uniformly by everyone. In light of this tension, we wrote items that imply the meaning violation, such as "It is *wrong* for the people in the game to act the way they acted." This way, those who felt that being ignored was meaning violating would answer the scale believing that being ignored is "wrong," whereas those whose expectations of how they felt they ought to be treated were not breached would not report that the treatment was "wrong."

We used adjectives like "wrong," "inappropriate," "improper," and "acted poorly" to capture the implied meaning framework of the individual. This implication approach has a number of advantages. Firstly, it captures each participant's idiosyncratic meaning framework rather than a broad, culturally-defined meaning framework that may not be applicable to the individual. Secondly, the absence of explicit treatment referents makes the measure robust to changes over time in the content of the individual's meaning framework. Lastly, an explicit scale is likely more bound to particular cultures and contexts, whereas a scale using implied treatment referents can be used meaningfully across a wide variety of contexts[3].

---

[2] The online supplements can be viewed at: https://osf.io/cd8n5/

Consistent with Hinkin's (1998) recommendations, we created items that were as short as possible, consistent in perspective, written in simple language that would be familiar to target respondents, and not "double barreled." These were screened for clarity and ease of understanding, resulting in a set of 36 items consisting of nine item wordings applied to four different targets (supervisor, coworker, employee, customer; see online Supplement B).

Sample 1: Content Validation

We wanted to be sure that our items assessed interpersonal meaning violation and not some other construct. Following Colquitt and colleagues' (2019) guidelines, we used Anderson and Gerbing's (1991) approach to content validation to retain items that were substantively valid and eliminate items that were not.

Participants

Based on Colquitt et al. (2019), we sought participants that were representative of the sample of interest (employed adults who reside in English-speaking countries) and who were not subject-matter experts and thus were able to use their sufficient intellectual ability to simply rate the correspondence between items and plain-language definitions of various constructs. All participants in all samples in this paper were screened to ensure that they had not participated in previous samples; thus, each sample represents a unique group of individuals. Sample 1 included 109 participants (53 female, 56 male; ages 19-66, M_{age} = 35.38, SD_{age} = 11.05) from the US (N = 39) and UK (N = 70), recruited by a panel company. Participants had a mean work experience of 14.57 years (SD = 10.96); they worked a mean of 32.25 hours per week (SD = 9.12) and had a mean tenure in their current job of 4.89 (SD = 5.91). Participants were employed in a variety of industries, primarily education (11.9%), health care and social assistance (11.0%), finance and insurance (8.3%), information services and data processing (6.4%), government and public administration (5.5%), retail (5.5%), transportation and warehousing (5.5%), and scientific or technical services (4.6%); no other industry was reported by more than 4% of respondents. Participant education level varied (high school = 15.6%; technical college = 6.4%; undergraduate degree = 43.1%; graduate degree = 22.9%, doctorate degree = 2.8%).

---

[3] Although a test of cross-cultural invariance is outside the scope of this article, we had these issues in mind when developing the scale and look forward to future studies on this matter.

Procedure

To create a rigorous test of an item's distinctiveness, Colquitt and colleagues (2019) suggest that two *orbit scales* be selected. The two orbit scales should be well-regarded in the literature, at the same stage of the "causal flow" as the focal construct, using the same referent as the focal construct, and not possessing a "part-whole" relationship with the focal construct (Colquitt et al., 2019). Following these guidelines, we selected coworker support (Susskind et al., 2003) and relationship conflict (Jehn et al., 2008).

Participants were provided with a definition of interpersonal meaning violation, as well as plain-language definitions of coworker support ("Knowing that coworkers will provide work-related assistance"; Susskind et al., 2003) and relationship conflict ("interpersonal incompatibilities—such as conflicting personal values—and the disagreements that arise from them"; Jehn, 1995). Participants were asked to match each item with the definition that best represented that item (participant instructions can be found in Supplement C online).

Measures

We used two indices to capture the extent to which items captured the intended construct. The proportion of substantive agreement (p_{sa}) represents the *proportion of participants* who categorized the item as it was intended. The values of p_{sa} can range from 0 to 1, where 1 represents all the participants correctly matching the item with its intended construct. The substantive validity coefficient (c_{sv}) captures how often participants assign an item to its intended construct *compared with other constructs*. The values of c_{sv} can range from -1 to 1, where higher values represent greater substantive validity.

Results and Discussion

Using the criteria set out by Colquitt et al. (2019), we retained items that were classed as having strong or very strong validity ($p_{sa} > 0.82$; $c_{sv} > 0.61$). This led us to eliminate the item "The world would be a troubled place if everyone acted like my [target] did" ($p_{sa} = 0.72$; $c_{sv} = 0.43$; see online Supplement C for full results). The remaining items were assigned to the intended interpersonal meaning violation construct, well beyond chance level.

It is common in scale development to either ignore the content validity or declare that it is acceptable on the basis of a small number of expert raters (Colquitt et al., 2019). This is problematic; firstly, if no content validation is reported, we cannot have confidence that the scale items are measuring what they propose to measure. Secondly, if only expert raters are used we cannot be sure that their learned preconceptions about the meaning of words in the scale are not vastly different from those of the lay readers who are the actual targets of the measure. Thus, we used Anderson and Gerbing's (1991) card-sort approach to content validation, which allows us greater confidence that the items that we created are actually measuring the construct of interest as rated by laypeople. This allowed us to reduce our scale to 32 items, yet we still needed to reduce the number further to create a scale that could be used practically in workplace research. Thus, we collected an additional sample for item reduction.

Sample 2: Item Reduction

Following Hinkin's (1998) recommendations, we collected an additional sample to reduce our scale to between 16 and 24 items (i.e., between 4 and 6 items per target: supervisor, coworker, employee, customer).

Participants

Sample 2 included 353 participants whose role requires them to a) serve customers, b) have supervisory responsibilities, c) have a direct supervisor at work, and d) have coworkers, and who were recruited by a panel company from the US (*N* = 132) or UK (*N* = 221). The final sample included 189 female and 164 male respondents, aged 19-64 (M_{age} = 36.97, SD_{age} = 10.00). Participants had a mean work experience of 16.44 years (*SD* = 10.00); they worked a mean of 39.19 hours per week (*SD* = 6.64) and had a mean tenure in their current job of 6.83 years (*SD* = 6.09). Participants were employed in a variety of industries, primarily health care and social assistance (19%), retail (15.9%), education (11.6%), finance and insurance (9.6%), and government and public administration (6.8%); no other industry was reported by more than 4% of respondents. Participant education level varied (secondary education = 4.2%; high school = 13.0%; technical college 11.0%; undergraduate degree = 44.2%; graduate degree = 21.8%; doctorate degree = 5.7%).

Procedure

We asked participants to think about the previous two weeks at work and respond to the 32 interpersonal meaning violation items (i.e., eight items aimed at each of the four targets: supervisor, coworker, employee, customer). The order of the targets was randomized (some participants saw all supervisor-related items first, others saw all coworker-related items first, etc.). Participants completed all items for one target before moving on to the next target.

Results and Discussion

To provide a robust test of the hypothesized four-factor structure of the data, we used parallel analysis[4] with an oblique (promax) rotation (Hendrickson & White, 1964; Horn, 1965; Kline, 2013; Watkins, 2006; Zwick & Velicer, 1986). Parallel analysis compares the eigenvalues of correlation matrices derived from randomly-generated data containing the same sample size and number of variables as the actual correlation matrices calculated from observed data. If the eigenvalue in the observed data is greater than in the random data, the factor is retained (Horn, 1965). We selected an oblique (promax) rotation because we expected the factors to be correlated (Thompson, 2004). The four-factor solution explained 88.40% of the variance in the interpersonal meaning violation construct, which exceeds the 60% rule of thumb proposed by Hinkin (1998). Furthermore, within factors, all relevant items had high and significant factor loadings (ranging from .90 to .97), exceeding Hinkin's (1998) suggested cutoff of .40. It is unusual to have factor loadings this high; however, these factors represent the *targets* (supervisor, coworker, employee, customer) rather than a more subtle conceptual factors. Thus, respondents were likely able to distinguish the factors more clearly than if they were tasked with differentiating *constructs*. We are comfortable that these factor loadings simply represent a unidimensional construct that is substantially affected by the source of the interpersonal meaning violation.

---

[4] We used parallel analysis because although it is common to use scree tests or the Kaiser criterion, these methods are problematic. Selecting the point in the scree test where the line elbows off is somewhat subjective and leaves researcher degrees of freedom that could lead to confirmation bias when selecting the number of factors (Frazier & Youngstrom, 2007). The Kaiser criterion (Kaiser, 1960), retaining items with an eigenvalue of greater than 1, has been demonstrated to often extract too many or too few factors depending on the number of variables included in a model (Fabrigar et al., 1999; Kline, 2013); we used parallel analysis as it solves both of these issues.

Given the uniformly high loadings, factor structure did not offer much guidance for eliminating items to produce a more concise scale. As such, based on the results of the previous studies, we selected the 16 items that best fit three criteria: They were clearly worded, demonstrated excellent construct validity, and had high factor loadings (see Appendix).

Table 2

Results of Exploratory Factor Analysis

	Factor				
	Supervisor	Customer	Employee	Coworker	Uniqueness
My coworker(s) acted in an unreasonable manner.	.021	.020	.032	**.903**	.139
It is bad for coworkers to act the way my coworker(s) acted.	.019	-.019	.009	**.953**	.080
It is wrong for coworkers to act the way my coworker(s) acted.	.021	.027	-.048	**.919**	.164
It is inappropriate for coworkers to act the way my coworker(s) acted.	-.007	.010	-.023	**.952**	.111
My coworker(s) acted in a way that is unfitting for someone in this kind of role.	.046	-.015	-.005	**.934**	.105
My coworker(s) acted in a way that is improper for someone in this kind of role.	-.064	-.007	.050	**.923**	.153
For someone in this kind of role, my coworker(s) acted improperly.	.000	-.026	.010	**.939**	.121
For someone in this kind of role, my coworker(s) acted poorly.	-.022	.010	-.011	**.933**	.147
My employee(s) acted in an unreasonable manner.	-.023	-.008	**.900**	-.016	.218
It is bad for employees to act the way my employee(s) acted.	-.001	.023	**.920**	-.016	.158
It is wrong for employees to act the way my employee(s) acted.	.021	.011	**.927**	.015	.110
It is inappropriate for employees to act the way my employee(s) acted.	-.019	.026	**.937**	.016	.114
My employee(s) acted in a way that is unfitting for someone in this kind of role.	-.001	-.005	**.964**	-.034	.098
My employee(s) acted in a way that is improper for someone in this kind of role.	.001	-.007	**.951**	.016	.085
For someone in this kind of role, my employee(s) acted improperly.	-.009	-.007	**.948**	.014	.100
For someone in this kind of role, my employee(s) acted poorly.	.042	-.033	**.914**	.021	.129
My customer(s) acted in an unreasonable manner.	-.059	**.922**	-.018	.043	.158
It is bad for customers to act the way my customer(s) acted.	-.006	**.928**	.036	-.014	.133
It is wrong for customers to act the way my customer(s) acted.	.021	**.933**	.005	-.006	.122
It is inappropriate for customers to act the way my customer(s) acted.	-.012	**.947**	-.013	.026	.101
My customer(s) acted in a way that is unfitting for someone in this kind of role.	.056	**.931**	.004	-.041	.123
My customer(s) acted in a way that is improper for someone in this kind of role.	.004	**.950**	-.019	.012	.098
For someone in this kind of role, my customer(s) acted improperly.	.002	**.950**	.007	-.025	.103
For someone in this kind of role, my customer(s) acted poorly.	-.005	**.949**	.000	.004	.099
My supervisor(s) acted in an unreasonable manner.	**.956**	-.002	-.029	.002	.106
It is bad for supervisors to act the way my supervisor(s) acted.	**.957**	-.003	.014	-.008	.081
It is wrong for supervisors to act the way my supervisor(s) acted.	**.950**	.024	.023	-.012	.077
It is inappropriate for supervisors to act the way my supervisor(s) acted.	**.967**	-.008	-.017	.008	.075
My supervisor(s) acted in a way that is unfitting for someone in this kind of role.	**.917**	.021	.038	.019	.109
My supervisor(s) acted in a way that is improper for someone in this kind of role.	**.914**	.001	.038	-.004	.139
For someone in this kind of role, my supervisor(s) acted improperly.	**.966**	.001	-.041	.021	.082
For someone in this kind of role, my supervisor(s) acted poorly.	**.976**	-.031	-.014	-.017	.080

Note. Applied rotation method is promax. Boldface type denotes the highest factor loading for each item.

In Phase 1, we developed a pool of potential IMVS items, assessed their content validity, and reduced the scale to 16 items. In the next Phase, we sought to establish that the scale is appropriate for use in research by demonstrating that it has appropriate psychometric properties.

Phase 2: Psychometric Properties

In Phase 2, we assessed the psychometric properties of the 16-item interpersonal meaning violation scale by examining the scale's reliability, factor structure, and susceptibility to method effects. Method effects stemming from impression management and negative/positive affectivity have been implicated as having important influence on self-reports (Brady et al., 2017; Ferris et al., 2008).

Impression management is people's tendency to present themselves in a manner that they perceive to be socially desirable (Leary & Kowalski, 1990). Impression management can create spurious correlations or suppress existing correlations between variables (Williams & Anderson, 1994). Perhaps people may be reluctant to report instances of interpersonal meaning violation out of fear that the admission may cause them to look bad.

Similarly, positive or negative affectivity could create spurious correlations or suppress existing correlations between variables (Burke et al., 1993). Perhaps people who have high levels of negative affect would report higher levels of interpersonal meaning violation. Or perhaps positive affect makes someone less likely to want to recall an unpleasant interpersonal meaning violation event, and thus causes underreporting of meaning violation. To ensure that the 16-item interpersonal meaning violation scale was not adversely influenced by affect or impression management, we examined the extent to which these variables were confounded with the interpersonal meaning violation scale. Finally, we tested the 16-item measure for gender invariance.

Sample 3: Psychometric Properties

Participants

Sample 3 included 190 participants from the US (*N* = 57) and UK (*N* = 133), recruited by a panel company, and whose role required them to a) serve customers, b) have supervisory responsibilities, c) have a direct supervisor at work, and d) have coworkers. This yielded a sample with 92 female and 98 male participants, aged 20-63 (M_{age} = 38.04, SD_{age} = 10.13) Participants had mean work experience of 17.29 years (*SD* = 10.44); they worked a mean of 39.46 hours per week (*SD* = 6.56) and had a mean tenure in their current job of 7.48 years (*SD* = 6.05). Participants were employed in a variety of industries, primarily health care and social assistance (17.4%), education (16.4%), retail (14.2%), finance and insurance (10.5%), government and public administration (7.9%), and construction (4.7%); no other industry was reported by more than 4% of respondents. Participant education level varied (secondary education = 6.8%; high school = 12.1%; technical college = 10.5%; undergraduate degree = 43.7%; graduate degree = 22.1%; doctoral degree = 4.7%).

Procedure

We asked participants to complete measures of impression management, positive affect, and negative affect, and to reflect on the previous two weeks at work. They responded to the 16-item interpersonal meaning violation scale (that is 4 item wordings applied to the 4 targets: supervisor, coworker, employee, customer) to report experiences during that time. All items were randomized, such that a participant might see an item about a coworker followed by an item about a customer. We recommend that the IMVS normally be delivered in blocks based on the target; however, to create a more conservative test of our factor structure and reduce the possibility of order effects driving that structure, we randomized all the IMVS items.

Measures

Impression Management. We used Paulhus's (1991) 20-item impression management scale (e.g. *"I never regret my decisions"*). Participants responded on a 7-point scale (1 = *Not true* to 7 = *Very true*).

PANAS. We used Watson, Clark, and Tellegen's (1988) 20-item positive and negative affect schedule to measure state affect at the time of the survey. Participants responded on a 5-point scale (1 = *very slightly or not at all* to 5 = *extremely*).

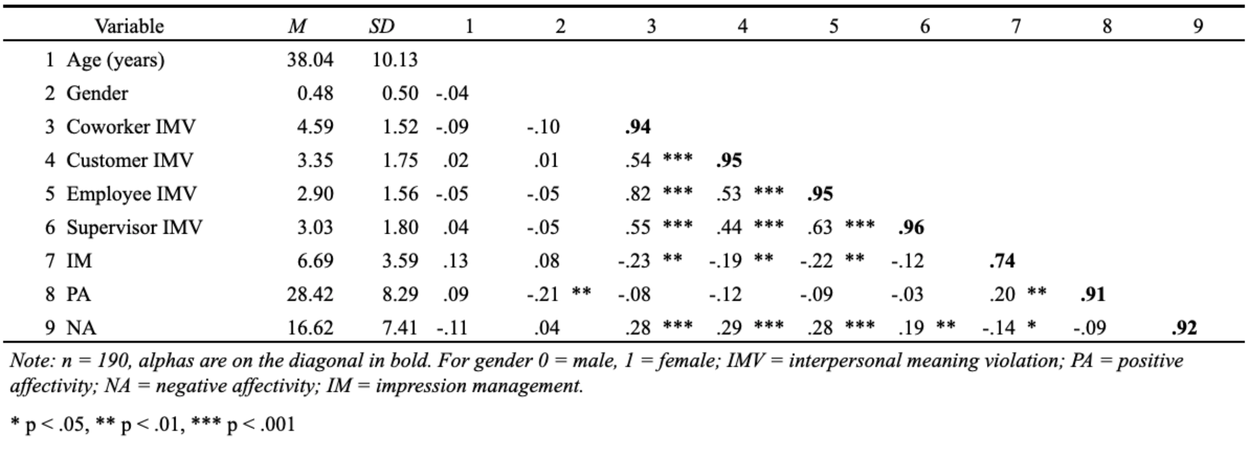
Interpersonal Meaning Violation. We measured interpersonal meaning violation with the 16-item scale (4 item wordings applied to the 4 targets: supervisor, coworker, employee, customer) developed in Phase 1 (see Appendix). Participants responded on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Results

All intercorrelations and reliabilities for Sample 3 are presented in Table 3.

Table 3

Descriptive Statistics, Zero Order Correlations, and Alphas for Sample 3



	Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1	Age (years)	38.04	10.13									
2	Gender	0.48	0.50	-.04								
3	Coworker IMV	4.59	1.52	-.09	-.10	**.94**						
4	Customer IMV	3.35	1.75	.02	.01	.54 ***	**.95**					
5	Employee IMV	2.90	1.56	-.05	-.05	.82 ***	.53 ***	**.95**				
6	Supervisor IMV	3.03	1.80	.04	-.05	.55 ***	.44 ***	.63 ***	**.96**			
7	IM	6.69	3.59	.13	.08	-.23 **	-.19 **	-.22 **	-.12	**.74**		
8	PA	28.42	8.29	.09	-.21 **	-.08	-.12	-.09	-.03	.20 **	**.91**	
9	NA	16.62	7.41	-.11	.04	.28 ***	.29 ***	.28 ***	.19 **	-.14 *	-.09	**.92**

Note: n = 190, alphas are on the diagonal in bold. For gender 0 = male, 1 = female; IMV = interpersonal meaning violation; PA = positive affectivity; NA = negative affectivity; IM = impression management.

* p < .05, ** p < .01, *** p < .001

Factor Structure. We sought to reconfirm the four-factor structure of our scale by conducting a confirmatory factor analysis (CFA) using the lavaan package for R (Roseel, 2012). The fit indices indicate good model fit, $\chi^2(98) = 148.05$, $p < .001$, CFI = .99, RMSEA = .05, SRMR = .02.

Reliability. Next, we calculated Cronbach's alpha for the 4-item IMVS for each of the four targets. For this, we used both Samples 2 and 3. The IMVS showed excellent reliability in Sample 2 ($\alpha_{supervisor} = .98$; $\alpha_{coworker} = .96$; $\alpha_{employee} = .97$; $\alpha_{customer} = .97$) and Sample 3 ($\alpha_{supervisor} = .96$; $\alpha_{coworker} = .94$; $\alpha_{employee} = .95$; $\alpha_{customer} = .95$).

Method Effects. The zero-order correlations between interpersonal meaning violation and positive affect, negative affect, and impression management are presented in Table 3. No IMV factors were correlated with positive affect. Coworker, Customer, Employee, and Supervisor IMV were correlated significantly with negative affect. Further, Coworker, Customer, and Employee IMV were correlated with impression management.

We tested for method effects using latent variable modeling (Podsakoff et al., 2003; Williams & Anderson, 1994) by comparing a baseline model with a model in which the method-effect latent variables (IM, PA, NA) confound the observed variables of the IMVS (see Figure 1). Analysis showed no significant chi-square change between the baseline model and the method-effect confounded model $\Delta\chi^2(48, N = 190) = 32.91$ $p > .05$, which indicated that the method effect variables (IM, PA, NA) did not have a significant influence on the measurement of IMV. In other words, the IMVS does not reflect artifactual variance from impression management concerns or affect.

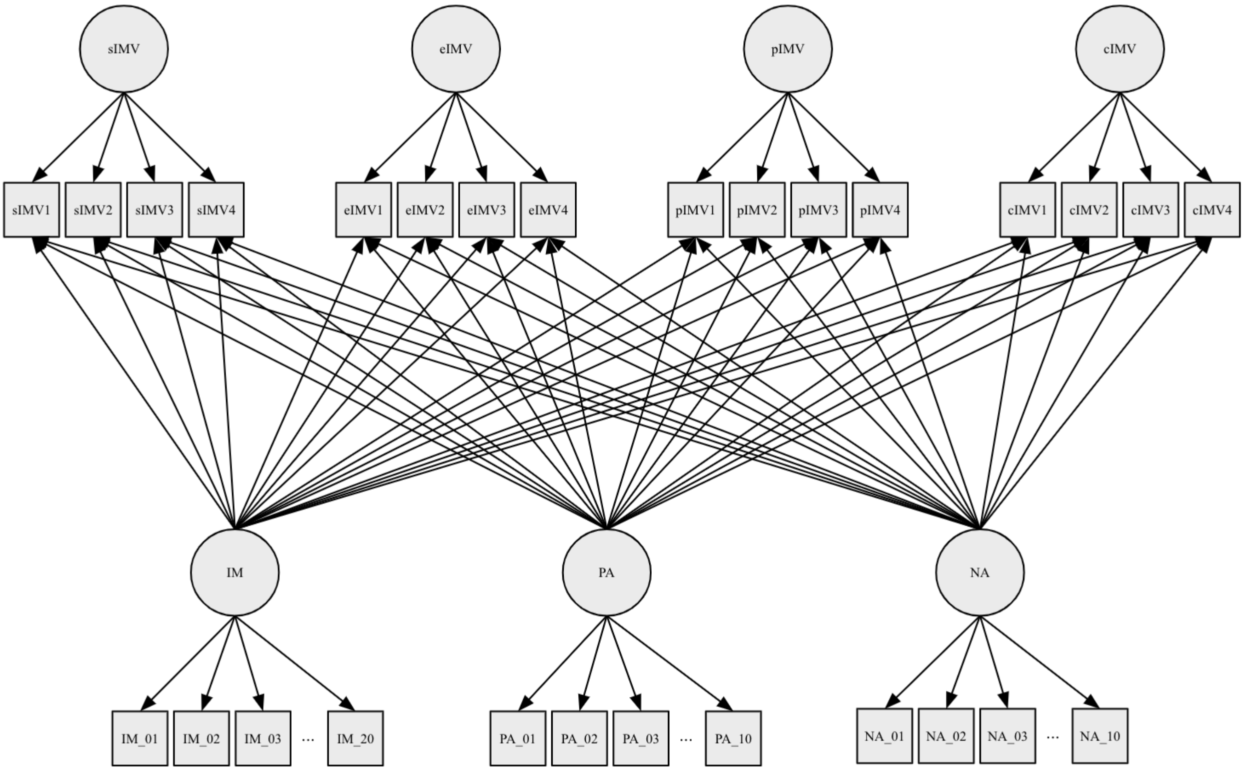

sIMV
eIMV
pIMV
cIMV
sIMV1
sIMV2
sIMV3
sIMV4
eIMV1
eIMV2
eIMV3
eIMV4
pIMV1
pIMV2
pIMV3
pIMV4
cIMV1
cIMV2
cIMV3
cIMV4
IM
PA
NA
IM_01
IM_02
IM_03
...
IM_20
PA_01
PA_02
PA_03
...
PA_10
NA_01
NA_02
NA_03
...
NA_10

Figure 1. Method effect confounded model. *Note:* sIMV = Supervisor Interpersonal Meaning violation, eIMV = Employee Interpersonal Meaning violation, pIMV = Customer Interpersonal Meaning violation, cIMV = Coworker Interpersonal Meaning violation, IM = Impression management, PA = Positive Affect, NA = Negative Affect

Gender Invariance. To test for the equivalency of the factorial structure across gender, we conducted a multiple groups CFA for women (*n* = 92) and men (*n* = 98). First, we calculated a baseline model where the factor loadings were free to vary across women and men. This demonstrated an acceptable fit, χ^2 (196) = 354.74, $p < .001$, CFI = .96, RMSEA = .09, SRMR = .04. We next constrained the items to be equal across women and men. The constrained data continued to fit the data well, χ^2 (208) = 368.32, $p < 001$, CFI = .96, RMSEA = .09, SRMR = .04. The lack of a significant difference between the two models, $\Delta\chi^2$ -difference (12) = 13.58, $p > .05$, suggests that the measure is invariant across gender.

Discussion

Considered together, the confirmation of the factor structure, good reliability, lack of method effects, and gender invariance suggest that the IMVS has sound psychometric properties. Even if a scale has sound psychometric properties, it must relate to measures of other similar constructs and differentiate the construct of interest from other unrelated constructs if it is to be of use to researchers. Thus, we began Phase 3.

Phase 3: Convergent and Discriminant Validity

In Phase 3, we assessed the convergent and discriminant validity of the 16-item interpersonal meaning violation scale. Convergent validity refers to the extent to which a scale relates to other measures of the same or similar constructs, whereas discriminant validity refers to the extent to which a scale does not relate to other dissimilar measures (Hinkin, 2005). As far as we are aware, no other validated scale measures of interpersonal meaning violation have been published. However, a number of constructs capture aspects of unpleasant workplace interactions. We expect interpersonal meaning violation to be related to, but not redundant with, such constructs. One such construct is abusive supervision (Mitchell & Ambrose, 2007), the sustained display of hostile verbal and non-verbal behaviors from a supervisor (Tepper, 2000). We expect that most people's meaning framework includes not being treated in a hostile manner by their supervisor; thus, we expect that abusive supervision will relate to supervisor interpersonal meaning violation.

Another construct to which interpersonal meaning violation should relate is bullying (Mikkelsen & Einarsen, 2002). Bullying is behavior where a person repeatedly and over time engages in negative acts such as offensive remarks, teasing, ridicule, or social exclusion toward another (Einarsen, 2000). We expect that most people's meaning framework includes an expectation that they should not be bullied. Unlike abusive supervision, bullying can be instigated by anyone; thus, we expect that bullying will relate to interpersonal meaning violation across multiple targets.

It is important, when creating a new measure that assesses negative interpersonal experiences, to ensure that the scale does not simply represent an absence of positive interpersonal experiences (Duffy et al., 2002). Toward this end, we contrast interpersonal meaning violation with psychological safety and perceived social support. Psychological safety is the shared belief that a team is a safe place for interpersonal risk taking (Edmondson, 1999) and perceived social support is the perception that people in one's environment can be relied upon (Vangelisti, 2009). We believe that most people would have a meaning framework that includes an expectation that they should feel safe in their team and receive a reasonable amount of social support, thus, we expect that psychological safety and social support will be mildly negatively related to interpersonal meaning violation. With regards to social support, we expect that the relationship will be stronger with the same target; for example, social support from a coworker will be more negatively related to interpersonal meaning violation from a coworker.

We expect that, although abusive supervision, bullying, psychological safety and social support will be correlated with interpersonal meaning violation, they will also be sufficiently different that they can be discriminated. Some people may not construe the presence of the negative phenomena (abusive supervision, bullying) or absence of positive phenomena (psychological safety, social support) as meaning violating; or they may consider these phenomena to only be meaning violating at greater extremes than they have experienced. Thus, although correlated, IMVS will be discriminated from the other phenomena. We use two methods to provide evidence of discriminant validity: First, we created two models for each pairing of IMVS and a single, significantly correlated construct; one model tested a one-factor structure and the other tested a two-factor structure. If the χ^2 were significantly worse for the one-factor model than the two-factor model, then this would suggest that interpersonal meaning violation and the other construct are distinguishable (Anderson & Gerbing, 1988). Second, we calculated the shared variance between our focal construct and the correlated construct. We consider the two constructs to be distinguishable when the average squared factor loading of each indicator on its respective latent construct is greater than the shared variance between the constructs (Fornell & Larcker, 1981).

Sample 4: Convergent and Discriminant Validity

Participants

Sample 4 included 132 participants recruited by a panel company from the US (N = 45) and UK (N = 87) whose role requires them to a) serve customers, b) have supervisory responsibilities, c) have a direct supervisor at work, and d) have coworkers (62 female, 70 male; aged 19-62; M_{age} = 35.92, SD_{age} = 9.84). Participants had mean work experience of 14.83 years (SD = 9.65); they worked a mean of 37.57 hours per week (SD = 9.63) and had a mean tenure in their current job of 6.97 years (SD = 6.88). Participants were employed in a variety of industries, primarily health care and social assistance (19.7%), retail (16.7%), education (12.1%) finance and insurance (9.1%), hotel and food services (7.6%), information services and data processing (6.1%); no other industry was reported by more than 4% of respondents. Participant education level varied (no formal qualifications = 0.8%; secondary education = 6.8%; high school = 13.6%; technical college = 9.8%; undergraduate degree = 40.2%; graduate degree = 23.5%; Doctorate degree = 5.3%).

Procedure

We asked participants to respond to the 16-item interpersonal meaning violation scale, as well as measures of abusive supervision, bullying, psychological safety, and social support; in particular, they rated the degree to which each construct described their work experiences during the previous two weeks.

Measures

Interpersonal Meaning Violation. We measured interpersonal meaning violation with the 16-item scale (four item wordings applied to each of the four targets: supervisor, coworker, employee, customer) developed in Phase 1.

Abusive Supervision. We used Mitchell and Ambrose's (2007) 5-item scale (an example item is *"My supervisor puts me down in front of others"*). Participants responded on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Bullying. We used Mikkelsen and Einarsen's (2002) 18-item scale (an example item is *"How often have you been subjected to repeated reminders of your blunders"*). Participants responded using the categories *never*, *now and then*, *about weekly*, *about daily*.

Psychological Safety. We used Edmondson's (1999) 7-item scale (an example item is *"Members of this team are able to bring up problems and tough issues"*). Participants responded on a 7-point scale (1 = *very inaccurate* to 7 = *very accurate*).

Social Support. We used an adaptation of Caplan and colleagues' (1980) 4-item social support scale with our four targets (supervisor, coworkers, employees, customers) instead of their targets ("your immediate supervisor" "other people at work" "Your wife [husband], friends and relatives"). An example item is *"It is easy to talk to my [target]."*

Participants responded on a 5-point scale with an additional ‘irrelevant’ option (0 = *don’t have any such person*; 1 = *not at all* to 5 = *very much*).

Results

All intercorrelations and reliabilities for Sample 4 are presented in Table 4.

Table 4

Descriptive Statistics, Zero Order Correlations, and Alphas for Sample 4

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age (years)	35.92	9.84													
2. Gender	0.47	0.50	-.12												
3. Coworker IMV	2.34	1.47	-.12	-.05	**.96**										
4. Customer IMV	3.25	1.84	-.08	.03	.36 ***	**.97**									
5. Employee IMV	2.57	1.59	-.13	.06	.72 ***	.51 ***	**.97**								
6. Supervisor IMV	2.45	1.75	-.13	.06	.58 ***	.32 ***	.57 ***	**.98**							
7. Abusive supervision	1.91	1.30	-.13	.09	.44 ***	.05	.33 ***	.76 ***	**.94**						
8. Bullying	1.40	0.50	-.14	.04	.61 ***	.22 *	.55 ***	.70 ***	.65 ***	**.94**					
9. Psychological safety	4.95	1.23	.18 *	-.12	-.63 ***	-.33 ***	-.58 ***	-.64 ***	-.57 ***	-.72 ***	**.84**				
10. Coworker SS	2.90	0.87	.10	.07	-.48 ***	-.17	-.40 ***	-.37 ***	-.32 ***	-.44 ***	.53 ***	**.89**			
11. Customer SS	1.93	0.83	.14	-.11	-.16	-.32 ***	-.11	-.16	-.09	-.11	.25 **	.37 ***	**.82**		
12. Employee SS	2.67	1.07	.09	-.01	-.30 ***	-.20 *	-.37 ***	-.15	-.08	-.25 **	.38 ***	.48 ***	.30 ***	**.91**	
13. Supervisor SS	2.76	0.89	.15	-.17 *	-.38 ***	-.24 *	-.41 ***	-.72 ***	-.65 ***	-.59 ***	.64 ***	.49 ***	.35 ***	.32 ***	**.91**

Note: $n = 132$, alphas are on the diagonal in bold. For gender 0 = male, 1 = female; IMV = interpersonal meaning violation; SS = social support

* $p < .05$, ** $p < .01$, *** $p < .001$

Convergent Validity. We predicted that interpersonal meaning violation would be positively related to bullying and that *supervisory* interpersonal meaning violation would be positively related to abusive supervision. We further predicted that psychological safety and social support would be mildly negatively related to interpersonal meaning violation involving the same target. Correlations among these variables, presented in Table 4, provide evidence for convergent validity. Of the 13 correlations, 12 were highly significant ($p < .001$) and the 13th correlation (between bullying and IMV from customers) was significant at $p < .05$. Further, the average correlation between interpersonal meaning violation and the convergent constructs was substantial, $r = .53$. The correlations ranged from .22 and .76.

Discriminant Validity. We predicted a significant difference between one-factor and two-factor models demonstrating discriminant validity between interpersonal meaning violation and each of the other constructs. As expected, the two-factor models (i.e., interpersonal meaning violation and the related construct are modeled as two separate factors) were preferable to the one-factor models (i.e., interpersonal meaning violation and the related construct are modeled as one omnibus factor). For all 13 significant relationships, a two-factor model provided significantly better fit than did a model with the variance between the two measures loading on the same factor (all *p*s < .001): Coworker IMV and bullying $\Delta\chi^2(1, N = 125) = 346.92$; Coworker IMV and psychological safety $\Delta\chi^2(1, N = 125) = 125.04$; Coworker IMV and coworker social support $\Delta\chi^2(1, N = 125) = 182.93$; Customer IMV and bullying $\Delta\chi^2(1, N = 106) = 583.02$; Customer IMV and psychological safety $\Delta\chi^2(1, N = 106) = 205.35$; Customer IMV and customer social support $\Delta\chi^2(1, N = 106) = 106.48$; Employee IMV and bullying $\Delta\chi^2(1, N = 110) = 499.53$; Employee IMV and psychological safety $\Delta\chi^2(1, N = 110) = 152.06$; Employee IMV and employee social support $\Delta\chi^2(1, N =$

110) = 195.47; Supervisor IMV and abusive supervision $\Delta\chi^2(1, N = 126) = 278.65$; Supervisor IMV and bullying $\Delta\chi^2(1, N = 126) = 483.48$; Supervisor IMV and psychological safety $\Delta\chi^2(1, N = 126) = 127.48$; Supervisor IMV and supervisor social support $\Delta\chi^2(1, N = 126) = 140.66$.

Similarly, we predicted that the average squared factor loadings of the scale items on their respective constructs would be higher than the shared variance among the constructs. This was the case with every comparison, including Coworker IMV (.53 vs .45 for bullying, .59 vs .47 for psychological safety, and .75 vs .53 for coworker social support), Customer IMV (.49 vs .34 for bullying, .61 vs .37 for psychological safety, and .71 vs .49 for customer social support) Employee IMV (.56 vs .46 for bullying, .63 vs .47 for psychological safety, and .77 vs .51 for employee social support), and Supervisor IMV (.85 vs .70 for abusive supervision, .56 vs .42 for bullying, .62 vs .49 for psychological safety, and .68 vs .82 for supervisor social support). In sum, we find substantial evidence for the convergent and discriminant validity of the IMVS.

In Phase 3, we showed that the IMVS relates to scales of similar constructs as we expected, and is differentiable from scales measuring those constructs. This suggests that the IMVS is a uniquely helpful tool for researchers to measure interpersonal meaning violation and, although it is similar to other constructs like abusive supervision and bullying, it is not the same thing. However, we have not yet established that the IMVS can help researchers to better understand important workplace outcomes. Thus, in Phase 4, we identify a number of important workplace outcomes that we theorize should be affected by IMV. In Phase 4, we also address potential concerns about method effects in three ways. First, we leave a time lag between when we collect the IMVS and the other items to ensure that participants respond based on their experiences rather than demand characteristics. Second, we ask another person to rate some of the outcomes that we expect to be related to the IMVS. Even if a participant managed to respond to all the questions the way they think we want them to (that is, if responses were driven by demand), the other rater's responses should be independent of any hypothesis-guessing, providing a more robust test.

Third, we ran an experiment where people were randomly assigned to either a condition that we theorized would be meaning violating or a condition that would be meaning maintaining. If the IMVS is to be helpful for researchers, then it should differentiate between people who have been treated in a meaning violating way and those who have not. The use of such a manipulation to provide additional evidence of the validity of a measure is highly regarded (Borsboom, 2005; Nunnally & Bernstein, 1994) but rarely implemented due to the difficulty of effectively manipulating constructs of interest (Podsakoff et al., 2013).

Phase 4: Criterion-Related Validity and Nomological Network

In Phase 4, we demonstrate the usefulness of the IMVS for research in the workplace by showing that it is related to important workplace constructs. First, we use multiwave, multisource data to demonstrate the relationship between interpersonal meaning violation and seven constructs to which it should theoretically relate. In particular, we focus on stress, rumination, psychological withdrawal, emotional exhaustion, organizational citizenship behavior, job satisfaction, and work engagement (Sample 5). The extent to which a measure is related to variables derived from theory is an important component of the validation process (Cronbach & Meehl, 1955; Hinkin, 2005). Thus, establishing the beginnings of a nomological network is an essential task in our scale validation efforts. This effort may also provide some initial insight into the possibility that interpersonal meaning violation is a unifying psychological process underlying a vast swath of workplace constructs that cause negative outcomes. This answers longstanding calls for efforts to better understand what causes harm in workplace experiences such as incivility (Hershcovis, 2011), interpersonal disagreements (Matz & Wood, 2005), and other common interpersonal interactions (Festinger, 1962), and may provide insight into how some individuals may remain unharmed despite such experiences. Second, we demonstrate criterion-related validity by using a common experimental manipulation (Williams et al., 2000; Williams & Jarvis, 2006) to create high and low levels of ostracism, which we expect to result in respectively high and low levels of interpersonal meaning violation (Sample 6). We also test whether the well-known effects of ostracism on emotions are mediated by interpersonal meaning violation.

Sample 5: Nomological Network

To establish a nascent nomological network, we collected reports in multiple waves and from multiple sources. By using a time delay and collecting reports from third-parties, we are able to make a stronger claim that the IMVS results are not just caused by methodological artifacts or participants trying to answer the items in the way they think they should be related (Podsakoff et al., 2003).

We selected outcomes that have a strong theoretical connection to interpersonal meaning violation, are some of the most commonly used outcomes in the literature (Fields, 2002), and have a significant potential to affect the quality of life of employees. Thus, we sought to explore the relationship between interpersonal meaning violation and stress, rumination, psychological withdrawal, emotional exhaustion, organizational citizenship behavior (OCB), work engagement and job satisfaction.

Workplace stress is caused by insufficient resources (emotional, physical, or environmental) to cope with the demands of the workplace. When interpersonal meaning violations occur, people are driven to resolve the uncomfortable feelings that result (Elliot & Devine, 1994; Matz & Wood, 2005). The addition of this drive to their existing workload will result in greater stress. Rumination is a mental activity whereby a person mentally scrutinizes a problem again and again (Pravettoni et al., 2007). Because meaning violation from interpersonal sources can be difficult to resolve, meaning-violating events at work may cause rumination that continues after work, thus reducing the opportunity for restful leisure time that would reduce stress (Vahle-Hinz et al., 2014). Psychological withdrawal is the extent to which a worker mentally (rather than physically) withdraws from the workplace (Schilpzand et al., 2016). When meaning violations occur, people can choose to use an avoidance strategy (Tjosvold & Sun, 2002), which we expect will result in psychological withdrawal: People may continue to turn up to work but they will not be fully engaged. Emotional exhaustion is the sense that one is emotionally overextended and depleted of emotional resources (Maslach, 1993). Because interpersonal meaning violation is an unpleasant experience and can be cognitively demanding, we expect it to cause an increase in emotional exhaustion. Thus, we hypothesize the following:

Hypothesis 1: All IMVs (coworker, customer, employee, supervisor) are positively related to stress.

Hypothesis 2: All IMVs (coworker, customer, employee, supervisor) are positively related to rumination.

Hypothesis 3: All IMVs (coworker, customer, employee, supervisor) are positively related to psychological withdrawal.

Hypothesis 4: All IMVs (coworker, customer, employee, supervisor) are positively related to emotional exhaustion.

Organizational citizenship behavior is "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Organ et al., 2005, p. 8). Citizenship behaviors can vary with regard to the beneficiary of the behavior. For example, citizenship behaviors directed at the organization could include taking an extra shift or volunteering to be on a committee; citizenship behaviors directed at individuals could include helping a colleague (Williams & Anderson, 1991); and citizenship behaviors directed at customers could include providing extra advice to a customer. We expect people will seek to punish those who violate their meaning framework by withholding OCB toward them. Furthermore, because supervisors represent the organization, we expect that meaning violation from supervisors will result in withholding OCB from both the supervisor and the organization.

Hypothesis 5a: Coworker IMV is negatively related to coworker OCB.

Hypothesis 5b: Customer IMV is negatively related to customer OCB.

Hypothesis 5c: Supervisor IMV is negatively related to supervisor OCB and organization OCB.

Job satisfaction refers to how much people like their jobs (Steger et al., 2019). Affective events theory (Weiss & Cropanzano, 1996) posits that people's moods and emotions while working are the key contributors to the affective component of job satisfaction. Because meaning violation tends to produce unpleasant emotions, we propose that interpersonal meaning violation has a negative effect on job satisfaction. Furthermore, work engagement is a positive work-related state of mind in which people are more likely to be vigorously absorbed in, and feeling energetically connected to, their work (Schaufeli et al., 2006). We expect meaning violation to reduce work engagement due to increased negative emotions. Furthermore, when someone experiences meaning violation, they are likely to discount the value of the source of the meaning violation (Simon et al., 1995). Thus, the greater the level of meaning violation at work, the less people will value their organization and the less engaged people will be with their work. Thus, we hypothesize the following:

Hypothesis 6: All IMVs (coworker, customer, employee, supervisor) are negatively related to job satisfaction.

Hypothesis 7: All IMVs (coworker, customer, employee, supervisor) are negatively related to work engagement.

Participants

Sample 6 included 196 participants, recruited by a panel company, from the US (*n* = 57) and the UK (*n* = 139) whose role requires them to a) serve customers, b) have supervisory responsibilities c) have a direct supervisor at work, and d) have coworkers (105 female, 91 male; aged 19-72; M_{age} = 33.49, SD_{age} = 8.72) . Participants had mean work experience of 12.65 years (*SD* = 8.44); they worked a mean of 35.22 hours per week (*SD* = 10.41) and had a mean tenure in their current job of 5.57 years (*SD* = 5.45). Participants were employed in a variety of industries, primarily retail (20.4%), health care and social assistance (16.3%), hotel and food services (10.2%), finance and insurance (7.7%), government and public administration (4.6%); no other industry was reported by more than 4% of respondents. Participant education level varied (secondary education = 6.6%; high school = 15.3%; technical college = 8.7%; undergraduate degree = 39.3%; graduate degree = 26.5%;

doctorate degree = 3.6%). Attrition across the three waves of data collection (outlined in Procedure, below) resulted in a final sample size of 164.

Procedure

The survey was delivered in three waves. In Wave 1, participants responded to the IMVS items, provided demographic information, and nominated a significant other to complete a separate survey in Wave 3. In Wave 2, two days later[5], participants completed measures of stress, rumination, psychological withdrawal, organizational citizenship behaviors, work engagement and job satisfaction. Of the 196 participants who were contacted to complete Wave 2, 188 responded (95.9% retention rate). Wave 3 occurred at the same time as Wave 2. In Wave 3, significant others were asked to report on their yoked participant's level of stress, emotional exhaustion, and job satisfaction. Of the significant others contacted, 164 responded and provided matched data for our analyses (84% response rate; 83 female and 81 male partners, aged 19-72; M_{age} = 33.68, SD_{age} = 9.00).

Measures

For all of the scales, participants were instructed to answer with reference to the previous two weeks.

Stress. We used Henry and Crawford's (2005) 7-item stress subscale (e.g., *"I found it hard to wind down"*). Participants responded on a 4-item scale (0 = *Did not apply to me at all - Never*; 1 = *Applied to me to some degree, or some of the time - Sometimes*; 2 = *Applied to me to a considerable degree, or a good part of the time - Often*; 3 = *Applied to me very much, or most of the time - Almost always*). For the significant-other report of stress, we adapted items and response options to reflect the intended target (e.g. *"My significant other found it hard to wind down"*).

---

[5] Following Podsakoff and colleagues (2003) we used a time delay to reduce common method variance by allowing the IMVS items to leave the short-term memory and reduce in salience before exposure to the DVs. Previous scale validation studies used delays from two days (e.g., Ferris et al., 2008) to a week (e.g., Brady et al., 2017); we chose a short delay to ensure that the meaning violating experiences reported in the IMVS in Wave 1 were still affecting the outcomes reported in Wave 2.

Rumination. We used Garnefski and Kraaij's (2006) 4-item subscale from the Cognitive emotion regulation questionnaire (an example item is *"I dwelt upon the feelings the situations at work have evoked in me"*). Participants responded on a 5-point scale (1 = *almost never* to 5 = *almost always*).

Psychological Withdrawal. We used Lehman and Simpson's (1992) 8-item scale (an example item is *"I spent time daydreaming"*). Participants responded on a 7-item scale (1 = *never* to 7 = *very often*).

Emotional Exhaustion. We adapted Wharton's (1993) 6-item emotional exhaustion scale to refer to one's significant other (e.g. *"My significant other feels burned out from work"*). Respondents answered on a 7-item scale (0 = *never feels this way* to 6 = *feels this way every day*)

Organizational Citizenship Behaviors. We measured organizational citizenship behaviors (OCB) with a focus on four different targets of the OCB (Lavelle et al., 2007): organization, supervisor, coworkers, and customers. We were not able to identify a single validated scale that included our four targets of interest; thus, following Lavelle et. al. (2007), we adopted scales from three different instruments. To measure organization OCB, we used Lee and Allen's (2002) 8-item OCB-organization sub-scale (e.g,. *"Demonstrate concern about the image of the organization"*). To measure supervisor OCB, we used Rupp and Cropanzano's (2002) 5-item scale (e.g. *"Pass along work-related information to your supervisor"*). To measure coworker OCB, (e.g. *"Assist others with their duties"*) we used Lee and Allen's (2002) 5-item interpersonal OCB sub-scale (e.g. *"Assist others with their* *duties"*). To measure customer OCB, we used Bettencourt and Brown's (1997) 5-item scale (e.g. *"Willingly go out of my way to make a customer satisfied"*). Participants responded to each item on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Satisfaction. We measured self-report job satisfaction using Agho and colleagues' (1992) 5-item scale (an example item is *"I find real enjoyment in my work"*). We adapted the 5-item scale to refer to one's significant other for the partner report of job satisfaction (an example item is *"My significant other finds real enjoyment in their work"*). Participants responded on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*).

Work Engagement. We used Schaufeli and colleagues' (2006) 9-item scale (an example item is *"When I get up in the morning, I feel like going to work"*). Participants responded on a 7-point frequency scale (0 = *never* to 6 = *always*).

Results and Discussion

All intercorrelations and reliabilities for Sample 5 are presented in Table 5.

Table 5

Descriptive statistics, Zero Order Correlations, and Alphas for Sample 5

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Age (years)	33.5	8.72																		
2. Sex	0.54	0.50	-0.26 ***																	
3. Coworker IMV	3.09	1.78	0.06	0.01	**0.98**															
4. Customer IMV	3.83	1.76	0.02	-0.03	0.31 ***	**0.96**														
5. Employee IMV	3.00	1.68	0.12	-0.08	0.71 ***	0.29 ***	**0.97**													
6. Supervisor IMV	3.13	1.76	0.12	0.02	0.55 ***	0.30 ***	0.51 ***	**0.97**												
7. Stress	2.13	0.62	-0.09	0.05	0.25 ***	0.31 ***	0.24 ***	0.26 ***	**0.84**											
8. Stress†	2.11	0.65	-0.01	0.16 *	0.30 ***	0.20 *	0.24 **	0.17 *	0.50 ***	**0.86**										
9. Rumination	3.20	1.00	0.00	0.11	0.17 *	0.19 **	0.19 **	0.23 **	0.43 ***	0.28 ***	**0.83**									
10. Psychological withdrawal	3.53	1.42	-0.21 **	-0.03	0.27 ***	0.21 **	0.25 ***	0.31 ***	0.47 ***	0.35 ***	0.22 **	**0.86**								
11. Emotional exhaustion	3.25	1.56	-0.05	0.09	0.21 **	0.20 *	0.21 **	0.22 **	0.49 ***	0.56 ***	0.35 ***	0.34 ***	**0.91**							
12. Coworker OCB	5.44	0.88	0.01	0.11	-0.10	0.03	-0.07	-0.08	-0.20 **	-0.11	0.10	-0.23 **	-0.06	**0.85**						
13. Customer OCB	5.60	1.25	-0.13	0.26 ***	-0.17 *	-0.16 *	-0.21 **	-0.14	-0.20 **	-0.11	-0.10	-0.39 ***	-0.14	0.34 ***	**0.96**					
14. Supervisor OCB	5.03	1.29	0.05	0.15 *	-0.04	0.02	-0.07	-0.18 *	-0.14	0.01	-0.01	-0.23 **	-0.06	0.49 ***	0.36 ***	**0.85**				
15. Organization OCB	5.03	1.29	0.17 *	0.11	-0.14	-0.08	-0.15 *	-0.23 **	-0.29 ***	-0.06	-0.06	-0.45 ***	-0.10	0.44 ***	0.44 ***	0.61 ***	**0.91**			
16. Job satisfaction	3.56	1.09	0.15 *	0.15 *	-0.23 **	-0.26 ***	-0.23 **	-0.27 ***	-0.47 ***	-0.26 **	-0.14	-0.61 ***	-0.37 ***	0.37 ***	0.49 ***	0.42 ***	0.64 ***	**0.93**		
17. Job satisfaction†	3.39	1.08	0.13	0.13	-0.24 **	-0.21 **	-0.31 ***	-0.20 **	-0.42 ***	-0.35 ***	-0.11	-0.44 ***	-0.50 ***	0.34 ***	0.31 ***	0.34 ***	0.41 ***	0.71 ***	**0.91**	
18. Work engagement	3.55	1.36	0.03	0.14	-0.32 ***	-0.34 ***	-0.31 ***	-0.32 ***	-0.41 ***	-0.28 ***	-0.16 *	-0.57 ***	-0.33 ***	0.37 ***	0.60 ***	0.40 ***	0.59 ***	0.82 ***	0.65 ***	**0.96**

Note. n ranges from 164 to 196; alphas are on the diagonal in bold. For sex, 0 = male, 1 = female. IMV = interpersonal meaning violation. OCB = Organizational citizenship behavior. † = Significant other report
* p < .05, ** p < .01, *** p < .001

Stress. As predicted by Hypothesis 1, each of the IMV sub-scales were positively related to both self-reports of stress (Coworker IMV: $r = .25$, $p < .001$; Customer IMV: $r = .31$, $p < .001$; Employee IMV: $r = .24$, $p < .001$; Supervisor IMV: $r = .26$, $p < .001$) and reports of stress from a significant other (Coworker IMV: $r = .30$, $p < .001$; Customer IMV: $r = .20$, $p < .05$; Employee IMV: $r = .24$, $p < .01$; Supervisor IMV: $r = .17$, $p < .05$).

Rumination. As predicted by Hypothesis 2, each of the IMV sub-scales were positively related to rumination (Coworker IMV: $r = .17$, $p < .05$; Customer IMV: $r = .19$, $p < .01$; Employee IMV: $r = .19$, $p < .01$; Supervisor IMV: $r = .23$, $p < .01$).

Psychological Withdrawal. As predicted by Hypothesis 3, each of the IMV sub-scales were positively related to psychological withdrawal (Coworker IMV: $r = .27$, $p < .001$; Customer IMV: $r = .21$, $p < .01$; Employee IMV: $r = .25$, $p < .001$; Supervisor IMV: $r = .31$, $p < .001$).

Emotional Exhaustion. As predicted by Hypothesis 4, each of the IMV sub-scales were positively related to partner-reported emotional exhaustion (Coworker IMV: $r = .21$, $p < .01$; Customer IMV: $r = .20$, $p < .05$; Employee IMV: $r = .21$, $p < .01$; Supervisor IMV: $r = .22$, $p < .01$).

Organizational Citizenship Behavior. In Hypothesis 5a, we predicted that coworker IMV would be negatively related to coworker OCB. We did not find evidence for this ($r = -.10$, $p = .16$). However, as predicted by Hypotheses 5b and 5c, respectively, customer IMV was negatively related to customer OCB ($r = -.16$, $p < .05$) and supervisor IMV was negatively related to both supervisor OCB ($r = -.18$, $p < .05$) and organization OCB ($r = -.23$, $p < .01$).

Satisfaction. As predicted by Hypothesis 6, each of the IMV sub-scales were negatively related to satisfaction. This was true for both self-reports (Coworker IMV: $r = -.24, p < .01$; Customer IMV: $r = -.26, p < .001$; Employee IMV: $r = -.23, p < .01$; Supervisor IMV: $r = -.27, p < .001$) and reports from a significant other (Coworker IMV: $r = -.24, p < .01$; Customer IMV: $r = -.21, p < .01$; Employee IMV: $r = -.31, p < .001$; Supervisor IMV: $r = -.20, p < .01$).

Work Engagement. As predicted by Hypothesis 7, each of the IMV sub-scales were negatively related to work engagement (Coworker IMV: $r = -.32, p < .001$; Customer IMV: $r = -.34, p < .001$; Employee IMV: $r = -.31, p < .001$; Supervisor IMV: $r = -.32, p < .001$).

These results provide further evidence of validity of the IMVS by showing the expected relationships with our theory-driven nomological net. Of the 35 predictions represented by Hypotheses 1-7, we found very strong evidence ($p < .001$) for 15 of the predictions, substantial evidence ($p < .01$) for 12, and small but significant evidence ($p < .05$) for five. One prediction (Hypothesis 5a: coworker IMV and coworker OCB) was not supported. This is in line with other scale development efforts (e.g. Brady et al., 2017; Ferris et al., 2008) and demonstrates that the IMV has a strong relationship with the theoretically derived nomological net, further confirming the practical utility of the IMVS for workplace research.

Sample 6: Criterion-Related Validity

For a scale to be useful, it should be able to predict theoretically-related phenomena (Hinkin, 1998). In this case, for the IMVS to be useful it should help to explain relevant interpersonal dynamics. We expected that many people's meaning framework contains an expectation of social inclusion; thus, if they are ostracised, they will experience meaning violation. Using the experimental paradigm CyberBall, we sought to manipulate high and low levels of ostracism for participants.

Using an experimental manipulation allows us to provide unique evidence of the causal relationship between IMV and negative emotions. In most scale validation studies, only correlational evidence is presented, which precludes causal inferences (Podsakoff et al., 2013). However, by randomly assigning people to different experimental manipulations, we were able to identify whether participants who were ostracized in the CyberBall game had greater negative emotions and greater interpersonal meaning violation, relative to those not ostracized. Furthermore, we expected that interpersonal meaning violation would mediate the relationship between ostracism and negative emotions. That is, we expected that participants who felt that ostracism was meaning violating would experience greater negative emotions, whereas those who experienced ostracism but did not find it meaning violating would not experience a significant change in their emotional state. We therefore hypothesized the following:

Hypothesis 8. Interpersonal meaning violation mediates the relationship between ostracism (vs inclusion) and general negative emotions, sadness, and hostility; specifically, ostracism (vs inclusion) increases individuals' tendency to experience interpersonal meaning violation, which, in turn, increases their general negative emotions, sadness, and hostility.

Participants

Sample size was determined using a Monte Carlo simulation (Schoemann et al., 2017); this yielded a recommended sample of 92 participants to provide 0.80 power to detect an effect. We deliberately over-sampled by 15% to account for potential exclusions; thus, Sample 6 included 106 participants, recruited by a panel company, from the US (*N* = 85) and UK (*N* = 21). The sample included 46 female and 60 male participants, aged 19-68 (M_{age} = 33.35, SD_{age} = 9.48). Participants had mean work experience of 12.31 years (*SD* = 10.08); they worked a mean of 33.92 hours per week (*SD* = 11.14) and had a mean tenure in their current job of 4.67 years (*SD* = 4.84). Participants were employed in a variety of industries, primarily finance and insurance (10.4%), education (9.5%), other manufacturing (8.5%), health care and social assistance (7.5%), arts, entertainment, and recreation (6.6%), government and public administration (6.6%), information services and data processing (6.6%), scientific or technical services (6.6%); no other industry was reported by more than 4% of respondents. Participant education level varied (secondary school = 3.8%; high school = 18.9%; technical college = 14.2%; undergraduate degree = 39.6%; graduate degree = 20.8%; doctorate degree = 2.8%). We excluded a total of eight participants (3 female, 5 male): three for attempting the study on a mobile phone, which we cannot be confident had sufficient screen resolution to display the CyberBall game, and five for indicating that they did not believe that the other players in the CyberBall game were real people. Thus, 98 participants were included in the final analysis.

Procedure

Participants completed a state measure of emotions and then began the manipulation. The study was presented as concerning visualization and teamwork. Participants were told that they would be paired with two other people (actually digitally programmed) for a game called “CyberBall” (Williams et al., 2000; Williams & Jarvis, 2006). The participants were instructed to visualize playing the game as if it were real life. They could toss a ball to either of the other two players and they were led to believe that the other players could do the same.

In the inclusion condition, the participant received the ball about 33% of the time. In the exclusion condition, participants received the ball twice and then were excluded for the rest of the game. In accordance with guidelines from a recent meta analysis (Hartgerink et al., 2015) the game terminated after 20 tosses and then participants completed the 4-item interpersonal meaning violation scale, a repeated measure of negative emotions (including hostility and sadness subscales), and manipulation checks.

Measures

Interpersonal Meaning Violation. We measured interpersonal meaning violation developed in Phase 1 with 4 items adapted to the context of the cyberball game by altering the target (e.g. *"The other players acted in a way that is improper for someone in this kind of role" "It is inappropriate for people to act the way the other players acted"*)

Negative Emotions. We measured negative emotions using the general negative emotion items from the PANAS-X (Watson & Clark, 1999) including the sadness and hostility subscales.

Manipulation Check. To check that the manipulation was effective, we used the following items: "I was ignored," "I was excluded" (1= *not at all*, 5 = *extremely*), and "Assuming that the ball should be thrown to each person equally (33% if three people), what percentage of the throws did you receive?" (free text entry).

Results and Discussion

The manipulation checks show that the manipulation was effective: Participants in the ostracism condition (compared with the inclusion condition) reported feeling more ignored ($M_{\text{ostracized}} = 4.36$, $SD_{\text{ostracized}} = 0.71$; $M_{\text{included}} = 1.84$, $SD_{\text{ostracized}} = 0.99$; $t(96) = -14.42$, $p < .001$) and more excluded ($M_{\text{ostracized}} = 4.45$, $SD_{\text{ostracized}} = 0.10$; $M_{\text{included}} = 1.75$, $SD_{\text{ostracized}} = 0.13$; $t(96) =$

-16.45, $p < .001$). They also reported receiving the ball a lower percentage of the time ($M_{\text{ostracized}}$= 9.04, $SD_{\text{ostracized}}$= 4.04; M_{included} = 26.92, $SD_{\text{ostracized}}$ = 6.53; $t(96) = 16.13$, $p < .001$).

As expected, participants in the ostracism condition reported higher levels of meaning violation ($M = 4.81$, $SD = 1.54$) than did those in the inclusion condition ($M = 1.93$, SD = 1.10) $t(96) = -10.76$, $p < .001$.

To test our prediction in Hypothesis 8, regarding interpersonal meaning violation mediating the relationship between ostracism and emotions, we built a mediation model in lavaan (Roseel, 2012). In the model, general negative emotions, hostility, and sadness were the outcome variables; ostracism (rejected vs included in ball toss) was the predictor variable; IMV was the mediator; and pre-experiment emotions were covariates. As noted above, ostracism significantly predicted IMV, a = 1.36, 95% CI[1.09, 1.62]. Interpersonal meaning violation, in turn, predicted general negative emotions, $b_1 = 0.59$, 95% CI[0.11, 1.07]; hostility, $b_2 = 1.09$, 95% CI[0.74, 1.44]; and sadness, $b_3 = 0.48$, 95% CI[0.12,0.84]. Supporting our predictions, we found a significant indirect effect of ostracism via IMV on general negative emotions, $ab_1 = 0.80$, 95% CI[0.13, 0.148]; hostility, $ab_2 = 1.48$, 95% CI[0.92, 2.03]; and sadness, $ab_3 = 0.66$, 95% CI[0.15, 1.16]. As shown in Figure 2, the effects of ostracism on emotions can be fully explained by the extent to which someone perceives the ostracism to be a breach of their meaning framework.

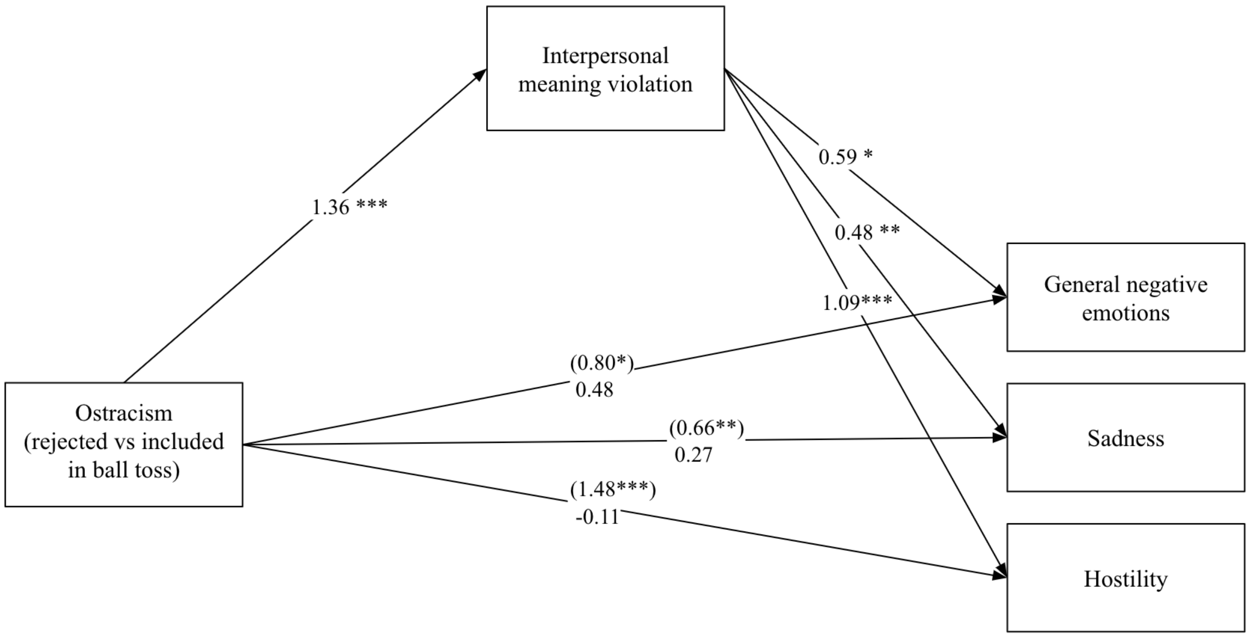

Interpersonal meaning violation
1.36 ***
0.59 *
0.48 **
1.09***
General negative emotions
Sadness
Hostility
Ostracism (rejected vs included in ball toss)
(0.80*)
0.48
(0.66**)
0.27
(1.48***)
-0.11

Figure 2. Interpersonal meaning violation as a mediator of the effects of ostracism on general negative emotions, sadness, and hostility (Sample 6). Path coefficients in parentheses represent total effects, whereas coefficients immediately below them are direct effects. * $p < .05$. ** $p < .01$. *** $p < .001$

This study demonstrated that the IMVS shows sound criterion-related validity in that, when we manipulated something theoretically meaning violating (ostracism vs inclusion), people responded as expected on the IMVS. Furthermore, we found that the IMVS explained the negative emotions that are commonly attributed to ostracism. The results of this experiment, together with the results of Sample 5 suggest that the IMVS has a satisfactory relationship with theoretically related variables.

General Discussion

Drawing on responses from 1,250 participants over six separate samples, using multiwave, multisource, and experimental data, we demonstrated that the IMVS is a valid and reliable measure of interpersonal meaning violation. We further demonstrated that the IMVS has strong content validity, good factor structure, an equivalent factor structure across genders, and minimal susceptibility to methodological factors. We showed that the IMVS has an appropriate level of convergence and discrimination with theoretically related constructs:

abusive supervision, bullying, psychological safety, and social support. And finally, we outlined a nascent nomological net in two samples. First, using multiwave, multisource data, we showed the relationship between interpersonal meaning violation and stress, rumination, psychological withdrawal, emotional exhaustion, organizational citizenship behavior, job satisfaction, and work engagement. Second, using an experimental paradigm, we found the well-established effects of ostracism on emotions can be fully explained by the extent to which someone perceives the ostracism to be a breach of their meaning framework. In summary, all the evidence suggests that the IMVS is a valid and reliable measure of interpersonal meaning violation in the workplace.

In earlier research, the theories of meaning maintenance have generated many exciting discoveries that have informed a broad range of psychological theory (Cooper, 2007; Proulx & Inzlicht, 2012a); yet, despite the impact of meaning maintenance theory on other fields, the concept of interpersonal meaning violation has had little impact on organizational psychology. Our purpose in this research was to create a valid and reliable measure of multiple sources of interpersonal meaning violation that can be prevalent in the workplace. We drew on existing meaning maintenance theories to develop a measure that was conceptually unidimensional but that had an important target factor effect: The source of a meaning violation makes a difference to the outcomes experienced. Through this work, we hope to help scholars who seek to examine this important but under-researched area.

Limitations and Future Directions

Like any research, this work has some limitations that should be acknowledged. Firstly, we relied on self reports of IMV. Doing so was a theoretically-driven choice, given that meaning violation is an inherently interpretive process. Only the individual has access to the experience of meaning violation, and the subjective nature of self-report is therefore essential to measuring meaning violation. That said, self-report carries the potential for methodological artifacts (Podsakoff et al., 2003). In Phase 4, we took precautions against methodological effects by creating a time delay between reports of the IMVS and the outcomes of interest, and by seeking reports from a third party for some outcomes of interest. We also examined the potential effects of affect and impression management--likely indicators of method bias--and found them to have minimal effects on the outcomes. These precautions, taken together, lead us to believe that the association between the IMVS and relevant organizational outcomes is not largely influenced by methodological artifacts. However, future research might use psychophysiological measures of meaning violation such as fMRI or cardiovascular reactivity to further validate the neural and physiological correlates of the experience of interpersonal meaning violation and to further demonstrate the usefulness of a self-report measure of IMV.

Secondly, with the exception of the CyberBall study, all relationships presented in this research are correlational, and thus causal relationships between the variables cannot be established. We provide one causal demonstration of the significance of interpersonal meaning violation in mediating the relationship between ostracism and negative emotions; however, the other relationships should not be interpreted as providing causal evidence. We encourage researchers who are interested in causality to employ experience sampling or cross-lagged designs. Nonetheless, given that this project focused on scale validation, we are confident that the observed correlations establish the usefulness of our measure in capturing interpersonal meaning violation.

Finally, all participants in our research were from the United States or United Kingdom and thus we would assume are generally WEIRD (Western, Educated, Industrialized, Rich, and Democratic; Henrich et al., 2010). Thus, we do not know how far the IMVS will generalize outside of these cultures and encourage researchers wishing to use the IMVS in other contexts to validate the scale prior to use. Two important considerations that are outside the scope of this research but of great interest are the impacts of *cultural logics* and *cultural tightness/looseness*.

Given the difference in cultural logics between honor, face, and dignity cultures (Yao et al., 2017) and potential differences in norms of politeness and offence (Cohen et al., 1999; Shafa et al., 2014) there seems a rich opportunity to understand the role of interpersonal meaning violation in cross-cultural contexts. First, the specific contents of meaning frameworks may differ across cultures. For example, untrustworthiness--a quality suggesting that someone can't be relied upon to support meaning frameworks--is signalled by lack of self-sturdiness in dignity cultures, by lack of concern for others' opinions in honor cultures, and by lack of regard for the hierarchy in face cultures (Leung & Cohen, 2011). Different behaviors would thus be expected to violate meaning, based in part on culture. Second, cultural logics may alter the extent to which people are sensitised to meaning violations. For example, in an honor culture ideal one is expected to defend one's honor if it is challenged, whereas in a face culture ideal such a response is considered disruptive and inappropriate (Leung & Cohen, 2011). These patterns suggest that, although the IMVS could be acceptably adapted across cultures with different cultural logics, we may find that different cultures experience meaning violations for different reasons.

Likewise, the culture dimension of tightness versus looseness may affect how frequently meaning violation occurs and how people respond. Cultural tightness/looseness refers to how strong social norms are and the extent to which people are sanctioned for breaching those norms (Gelfand et al., 2006). Cultures with higher cultural tightness may experience interpersonal meaning violations from situations that would be considered acceptable by people from other cultures. Alternatively, perhaps people from cultures with high cultural tightness are more careful not to violate other's meaning frameworks because of the potential for sanction. Regardless, future research could benefit from considering culture effects on meaning violation as assessed by the IMVS. Further, the IMVS offers a useful tool for extending research on cultural tightness/looseness to organizational cultures.

Although meaning violation is universally unpleasant and aversive (Heine et al., 2006; Townsend et al., 2013), some individual differences may interact with IMV to moderate the effects. For example, people with high levels of self-concept clarity (i.e. those with self-beliefs that are clearly defined, internally consistent, and stable; Bechtoldt et al., 2010; Campbell et al., 1996) may be able to recover more quickly from threats to their meaning framework in instances of IMV, making the outcomes of IMV less deleterious. Or perhaps people high in neuroticism (Bianchi, 2018) spend more time thinking about IMV events or experience more unpleasant emotions due to the events, and thus have more negative workplace outcomes. Furthermore, it is not clear whether individual differences moderate the effect of IMV on outcomes (as proposed) or perhaps individual differences moderate the construal of an event as meaning violating. For example, people with higher dispositional levels of behavioral inhibition system sensitivity (Carver & White, 1994) may be more likely to interpret a potentially meaning violating event as high in IMV because they tend to be more sensitive to risks, and meaning violation feels risky (Hirsh, 2012). There is certainly no shortage of potential individual difference moderators that could affect the likelihood that an individual will experience IMV or that experiences of IMV will have negative workplace outcomes.

Conclusion

We believe that the IMVS is a valid and reliable measure of interpersonal meaning violation. It is an important tool that can, among other things, help researchers to integrate their work into the rich theoretical resource that is provided by meaning maintenance theory and the other cognitive consistency theories which it subsumes. Interpersonal meaning violation is qualitatively different from measures of workplace behaviors and experiences, such as incivility, because it acknowledges that a single behavior may be interpreted by one person as meaning violating, yet by another person benign. Our studies suggest that IMV is separable from numerous constructs that one would expect to cause meaning violation (e.g., abusive supervision, bullying, and lack of social support or psychological safety). Interpersonal meaning violation is aversive and unpleasant and potentially influences a range of outcomes that are important to employees and organizations (e.g. stress, rumination, psychological withdrawal, emotional exhaustion, organizational citizenship behavior, job satisfaction, and work engagement). Taken together, our results suggest that IMV is an important construct to research, although it has been largely ignored up until now due to the lack of an effective measure. We hope that the development of this measure will give rise to an exciting application of meaning maintenance theory to organizational psychology.

Chapter 3: Now it's Getting Personal:

Comparing Effects of Meaning Violation and Conflict Type on Workplace Wellbeing

Abstract

Conflict can be helpful or harmful. Though past research has focused on conflict type (task, process, relationship, status) as a key differentiator of helpful versus harmful conflict, we offer a new perspective: We propose that conflicts become harmful--operationalized here as reducing job satisfaction, satisfaction with co-workers, and organizational commitment, and increasing turnover intentions--when participants take the conflict personally. We further argue that taking conflict personally (TCP) results when one's personal sense of meaning is violated through the counterpart's engaging in activity seen as inappropriate or transgressive. Study 1 shows that violations of belonging expectations trigger TCP and harm workplace wellbeing, and these effects supersede those of conflict type. Study 2 replicates this finding using violations of social norms. Finally, Study 3 uses experience sampling to validate our arguments in field settings and over time. Meaning violation and TCP appear to be stronger predictors of responses to conflict than is conflict type.

“...there is nothing either good or bad, but thinking makes it so”

–Shakespeare

Is conflict helpful or harmful? Workplace conflict has been associated with reduced workplace wellbeing, which is reflected in how employees feel about their jobs, coworkers, and organizations (Hjerto, 2017), and their desire to continue work (Chan et al., 2008; McKnight et al., 2001). However, research suggests that this is not true for all conflicts: An argument about work tasks can improve decision quality and lead to more positive outcomes (e.g., Thompson, 1991), whereas an argument about the appropriateness of a joke might lead someone to take the conflict personally and thereby harm workplace wellbeing (e.g., de Wit & Greer, 2008). Indeed, the injunction to “not take conflict personally” is pervasive in advice on managing conflict (Fisher et al., 2011; Hample & Cionea, 2010). But what causes people to take conflict personally? We propose that a mismatch between an actor’s expectations of how someone should act during a conflict and a counterpart’s actual behavior might be the cause. We challenge a dominant conflict paradigm (hopefully without causing anyone to take it personally) by questioning whether the focus of conflict is as important as whether one takes it personally in affecting outcomes such as workplace wellbeing.

The dominant paradigm in conflict research is *conflict type* (Jehn, 2014), which proposes that conflicts can be classified by their focus on the domains of task, relationship, or process, or on parties’ status. *Task conflict* results from perceived differences in opinions, ideas, and viewpoints about a group task (Jehn, 1995). *Relationship conflict* is characterized by interpersonal incompatibilities--such as conflicting personal values--and the disagreements that arise from them, including personality clashes (Jehn, 1995). *Process conflict* arises from perceived differences in opinions about how work and resources should be divided and delegated (Jehn, 1997; Jehn & Mannix, 2001). *Status conflict* reflects struggles relating to individuals' relative positions in a social hierarchy (Bendersky & Hays, 2011).

Despite its prominence, conflict-type theory has not produced a settled understanding of the effects of conflict (cf. Weingart et al., 2015). For example, some work argues that relationship conflict produces negative outcomes whereas task conflict can be beneficial (Jehn, 1995). Other work shows that status (Bendersky & Hays, 2011) or process (Greer & Jehn, 2007) conflict is uniquely detrimental. Furthermore, confusion arises around the conceptualization of conflict types (Barki & Hartwick, 2004): Some research conflates any conflict that produces heated, personalized reactions with relationship conflict, even if the content of the conflict is work-focused (cf. Jehn et al., 2008). However, as we discuss further below, such heated reactions can be present in any type of conflict, not just relationship conflict (Jehn et al., 2008).

If conflict is sometimes productive and sometimes harmful, it is important to understand what makes the difference. Conflict type initially seemed to offer insight; e.g., task conflict might uniquely help workers learn from each other and thus make the workplace more engaging (Thompson, 1991). However, meta-analytic evidence (De Dreu & Weingart, 2003; de Wit et al., 2012; O'Neill et al., 2013) implies that conflict type cannot fully predict effects of conflict. De Dreu and Weingart (2003) found that *all* conflict types have similar negative effects. De Wit and colleagues (2012) confirmed that conflict type offers little predictive power. Research may have overemphasized the importance of conflict type. Instead, mixed findings suggest, type may tend to be conflated with other factors that drive the detrimental effects of conflict.

Conflict type theory also lacks conceptual clarity. On the one hand, type is defined in terms of the focus or domain of conflict, as described earlier. On the other hand, it is often treated as a function of the parties' responses to conflict. For example, most people have experienced a conflict that was solely task-focused, yet things got heated and people got upset--a response that conflict-type theory associates with relationship conflict. The conflict-type literature has argued that, as soon as a disagreement gets emotional, it becomes an instance of relationship conflict (Jehn, 1997). However, this distorts the construct definitions on which the literature is founded. By definition, a conflict is a "task conflict" if it remains entirely task-focused. Yet it is possible for one party to resent having their ideas questioned, even if the matter of discussion remains task-focused. Likewise, by definition a conflict is relationship-focused if it involves solely a personal, non-task issue. However, parties to such a conflict could remain calm and thoughtful if both believe that it is beneficial to have some personal disagreements. Conflict-type scholarship has tended to conflate the presence of "heat" during conflict with relationship conflict. However, as illustrated by the two examples above, this is inconsistent with the focus- or domain-oriented definitions of conflict types. Instead, we argue, affective intensity in a conflict is orthogonal to conflict type (see Jehn et al., 2008; Weingart et al., 2015). In any type of conflict, it is possible for parties to become heated and to take the conflict personally. And this, we argue, negatively affects workplace wellbeing.

In their 2012 meta-analysis, de Wit and colleagues distinguished two broad classes of DVs that characterize conflict research: distal outcomes and proximal outcomes. Distal measures assess group performance outcomes such as innovation, productivity, and effectiveness. Proximal measures assess outcomes such as job satisfaction, co-worker satisfaction, organizational commitment, and turnover intentions. In the present work, we focus on proximal measures because the most immediate consequence of a heated, affectively-intense conflict is likely to be negative intraindividual response. In particular, we have adopted a cluster of measures frequently found in past conflict type research and grouped them together under the label *wellbeing*. Though wellbeing can refer to a wide range of elements (see, e.g., Seligman, 2011), in a work context it is generally seen to encompass individual motivation and affect regarding oneself, one's work, and one's relationships (e.g., Baptiste, 2008; de Wit et al., 2012).

Each of the meta-analyses on conflict type (De Dreu & Weingart, 2003; de Wit et al., 2012; O'Neill et al., 2013) points to a significant negative effect of conflict of all types on workplace wellbeing. However, conflict type theorists suggest that workplaces need at least a small amount of task conflict because of the positive benefits that it can produce, and they need less relationship, status, and process conflict because of the negative outcomes that they produce. This said, the empirical work consistently shows that all conflict types produce negative outcomes (De Dreu & Weingart, 2003; de Wit & Greer, 2008). We examine common outcomes from the conflict-type literature (job satisfaction, co-worker satisfaction, organizational commitment, and turnover intentions) that have not, despite being used to support such predictions, in fact been differentiated by conflict type (De Dreu & Weingart, 2003; de Wit & Greer, 2008). Thus, we demonstrate the ability of our framework to reconcile the inconsistencies in past findings.

Taking Conflict Personally

Taking conflict personally (TCP) is a negative affective response; it can be so intense that one feels personally punished, hurt, threatened, or devalued (Dallinger & Hample, 1995), or even that the essence of one’s being is at stake (Hample, 2016). People vary in trait TCP--the extent to which they *tend* to take conflict personally--but we focus on TCP as a state--the extent to which they take conflict personally in a *specific* event. Reconsidering the conflict-type literature in light of TCP may better explain interpretations of and responses to conflict--and, of key interest here, how conflict affects outcomes--than does conflict type alone.

TCP is generally experienced as unpleasant and negative (Wallenfelsz & Hample, 2010). Because people's workplace wellbeing tends to be driven by their feelings during the workday (Weiss & Cropanzano, 1996), we propose that experiencing TCP during work conflicts negatively affects people’s workplace wellbeing. For example, unpleasant experiences (such as high-TCP conflicts) with coworkers tend to reduce positive feelings about them (Baron, 1991; Costa, 2003). When people’s jobs are unpleasant (as when the job features high-TCP conflicts), they are less able to focus on the positive, productive aspects of their jobs (Fisher, 2000; Weiss et al., 1999). Lastly, if a person’s job involves aversive experiences (such as high-TCP conflicts), they are more likely to want to quit (Tett & Meyer, 1993; Vandenberghe et al., 2011). In sum, TCP likely leads to negative effects on outcomes related to workplace wellbeing, such as job satisfaction, coworker satisfaction, organizational commitment, and turnover intentions.

Again, though it is common advice to “not take conflict personally” (Fisher et al., 2011; Hample & Cionea, 2010) conflict research has focused on chronic dispositional tendencies to do so (Dallinger & Hample, 1995), rather than on responses in the moment. Clearly, though, one can take a conflict personally even without a chronic tendency toward feeling embattled or playing the martyr. As such, considering TCP as a state can offer a better understanding of interpersonal conflict.

Note that we do not suggest that any specific type of conflict is more or less likely to produce high levels of TCP. Any type of conflict can be taken personally. Yet, the higher the level of conflict that a person experiences, the more opportunity that they have to be involved in a conflict producing high levels of TCP. Thus, we propose that as the amount or intensity of any type of conflict increases, TCP is likely to increase and workplace wellbeing to decrease. Each of the three studies will test the above predictions. Our logic draws on the *meaning maintenance model*[6], which posits that humans have an innate drive to form mental representations of expected relations, and violation of these expected relations is unpleasant (Heine et al., 2006; Proulx et al., 2012). Next, we introduce this model and show how violation is central in predicting high TCP.

The Role of Meaning

Meaning is the mental representation of expected relationships (Baumeister, 1991). Humans tend naturally to construct such representations, or *meaning frameworks* (Proulx & Heine, 2008). These frameworks are expectations about how the world should behave: When typing, we expect letters to appear on the computer screen. When drinking water, we expect to get a wet mouth, not a mouth full of sand. Such *meaning maintenance,* when the person's experience is consistent with their expectations, allows people to make sense of their experiences and be effective (Park, 2010). Furthermore, humans possess a fundamental drive for mental representations to be cognitively consistent (Festinger, 1962; Gawronski & Strack, 2004) because inconsistent cognitions signal an erroneous framework (Gawronski, 2012). Such error carries substantial risk--if our ancestors believed that (a) *all fluffy animals are*

---

[6] Note that the meaning maintenance model draws together a wide body of meaning theory (Proulx et al., 2012), including cognitive dissonance (Festinger, 1962), self-affirmation theory (Aronson et al., 1999), reactive approach motivation (McGregor et al., 2010), and expectancy violation theory (Mendes et al., 2007).

safe, and (b) *all tigers are fluffy,* they would not have lasted long enough to produce descendents. Thus, a stimulus inconsistent with the meaning framework, such as (c) *a tiger is gnawing on my friend,* compels revision of the belief about fluffy things (e.g., *fluffy animals are safe if they are herbivores)* or about tigers (e.g., *tigers have sharp claws and teeth hiding in their fluffy exterior)*. Either way, updating the meaning framework is critical to adaptive outcomes--even survival.

A meaning framework inconsistent with reality--in short, a *meaning violation*--may lead to unhelpful or mutually exclusive actions (Gawronski, 2012). Thus, people tend--and actively strive--to maintain a relatively consistent state of meaning maintenance (Heine et al., 2006); when violation occurs, it triggers a drive to resolve the inconsistency. It is important to distinguish between violations of expectancy and violations of meaning. Expectancies predict what *will* happen, whereas meaning captures what *should* happen. For example, at a party Maria might expect that Santiago *will* keep talking for another hour after they have agreed to leave. However, she might believe that he *should* stop talking and order an Uber. Hence, when Santiago strikes up yet another conversation on the way out the door, Maria's meaning framework is breached. "Should" is a key driver of meaning frameworks and a key reason why violating meaning feels so aversive and threatening to the perceiver (Heine et al., 2006).

Revisiting Conflict Type with a Meaning Lens

Relationship conflict, process conflict, and status conflict have each been the subject of in-depth inquiry suggesting a unique ability to produce negative outcomes in the workplace. We argue that apparent effects of conflict type more typically reflect underlying meaning violations. In the next section, we outline the mechanisms that past research has proposed as unique to each conflict type and demonstrate how findings can be explained more parsimoniously using meaning maintenance theory.

A long history of study has highlighted negative effects of relationship conflict at work (Deutsch, 1969; Guetzkow & Gyr, 1954). Researchers have argued that relationship conflict has a unique ability to increase stress and anxiety (Jehn & Mannix, 2001) and to encourage negative attributions (Baron, 1991), and thus that it is uniquely positioned to cause negative outcomes. We suggest that these are examples and outcomes of meaning violation: A relationship conflict without a meaning violation is not likely to cause stress and anxiety, or to generate unwarranted negative attributions about one's counterpart. For example, if two people have a conflict about a personal, non-work issue, such as differing political views, and they both think that conflicts of this type create interesting discussions, they will not experience a meaning violation, and thus the negative effects of relationship conflict will not ensue.

Some scholars have posited that status conflict is uniquely detrimental because it induces unhelpful, competitive behaviors (Bendersky & Hays, 2011; Loch et al., 2000) or causes people to feel disrespected (Kilduff et al., 2016). Again, we propose that these effects can be more parsimoniously explained by meaning maintenance theory. Status conflict occurs when the perceiver feels they should rank higher than someone else who seems to be asserting status. If meaning violation were not part of the conflict, then the disagreement would lose its heat. For example, a team might agree that leadership should be rotated among members every month, but in June two different people think it is time for their leadership turn. They disagree due to different recollections, but no motivational meaning is attached--one merely forgot the timing. As a disagreement over rank, this constitutes status conflict; however, without a meaning violation it is no longer uniquely problematic.

Finally, process conflict has also been said to result uniquely in negative outcomes, caused by the implication that a group member lacks respect for others or regards them as lacking capabilities (Behfar et al., 2010). In some circumstances, however, process conflict has been identified as productive (Greer & Jehn, 2007). We suggest that this contradiction is due to meaning violation. If a process conflict implies that an actor's capability is questioned, yet the actor thinks that they should be regarded as capable, then this meaning violation will result in negative outcomes. However, if the actor is comfortable with the idea that right now they don't have all the skills that they need, then no meaning violation will occur and no negative outcomes ensue.

All three of the above examples contain implications of disrespect. Broadly speaking, a common expectation in interpersonal interactions is that one should be treated with basic courtesy and respect. What defines courtesy and respect, however, differs from person to person. These differences are one source of meaning violation likely to result from conflict. For example, though some people welcome a brash and confrontational style of exploring issues, James may believe that anyone who disagrees with him should take care not to insult his views. If they call one of his points "irrational," he infers that they do not respect him (Morewedge, 2009). These dynamics, we argue, may account for some past findings of the tendency for specific types of conflict to lead to poorer wellbeing (De Dreu & Weingart, 2003; O'Neill et al., 2013). However, we further argue that the underlying driver of this apparent relationship is actually meaning violation.

Of key importance, interpersonal qualities such as respect or courtesy are not the only kinds of meaning violations that can trigger negative conflict outcomes. In fact, *any* meaning violation carries the potential to threaten one's meaning framework, and therefore can elicit very negative responses. Even if a meaning-violating situation is impersonal and absurd, as long as meaning is violated, it can cause negative outcomes. This generality with respect to the content of the violation means that any conflict type can trigger negative outcomes, and that the degree of negative response will depend much more on the degree of violation than on conflict type.

In particular, we suggest that all types of conflict increase TCP because conflict produces many opportunities for meaning violation, and meaning violation drives TCP. Humans tend to assume that, if they are having an unpleasant experience, their counterpart is aware of "causing" that unpleasant experience and is acting deliberately. At the very least, the counterpart is choosing not to stop causing the unpleasantness (Morewedge, 2009), Thus, people tend to attribute the negative and unpleasant state caused by meaning violation to the intentional actions of their interaction partner. Because it is difficult to imagine why a counterpart would do such a thing if they didn't mean to cause distress, the perceiver infers that the action was directed at them in a personal manner--that is, they take the conflict personally. If, however, the conflict is considered acceptable and normal (i.e., it is not meaning violating), they experience low TCP (see Figure 3).

In addition to driving TCP, we have argued that meaning violation leads directly to negative wellbeing consequences. As discussed earlier, we focus on individual outcomes, as well as the relationship between the individual and their work context. We selected four common outcomes from past conflict literature (de Wit et al., 2012) that reflect distinct aspects of individual wellbeing at work. Job satisfaction focuses on the work that individuals are tasked to perform each day. Co-worker satisfaction focuses on the people with whom the task is performed. Organizational commitment focuses on the context in which the work and work-mates are situated. Finally, turnover intentions reflect the ability to leave a job--often the last remaining choice that an individual has when a workplace has become untenable (Farrell, 1983). Thus, we consider turnover intentions a significant signal that conflict has harmed wellbeing. Because, as discussed earlier, TCP also harms wellbeing, we predict both direct and indirect effects of meaning violation on these outcomes.

Hypothesis 1: Meaning violation is the driver of TCP and leads, directly and via TCP, to workplace wellbeing (i.e., job satisfaction, co-worker satisfaction, organizational commitment, and turnover intentions).

We test this prediction in Studies 1 and 2 by manipulating meaning violation using different sources of meaning violation and examining the effects of TCP and wellbeing. In Study 3, we measure meaning violation and test its mediating role between conflict and TCP and wellbeing.

Though conflict type has received a great deal of research attention, we believe that it is not the key predictor of outcomes; rather, meaning violation and resultant TCP are more predictive. Where past research has shown outcomes to depend on conflict type, we argue, this reflects the relatively unexamined role of these variables. We expect the apparent effects of each of the conflict types on wellbeing to be mainly driven by meaning violation and TCP.

Hypothesis 2: Though conflict predicts meaning violation, TCP, and workplace wellbeing relative to the absence of conflict, conflict type is less predictive of TCP and wellbeing than is meaning violation.

We test this prediction in several ways. Study 1 tests the effect of conflict, relative to no conflict, on TCP and wellbeing. Studies 1 and 3 allow direct comparisons of the effects of conflict type and meaning violation, to confirm that meaning violation is a better predictor of TCP and wellbeing. Study 3 tests the full causal and mediational chain implied by Hypothesis 2.

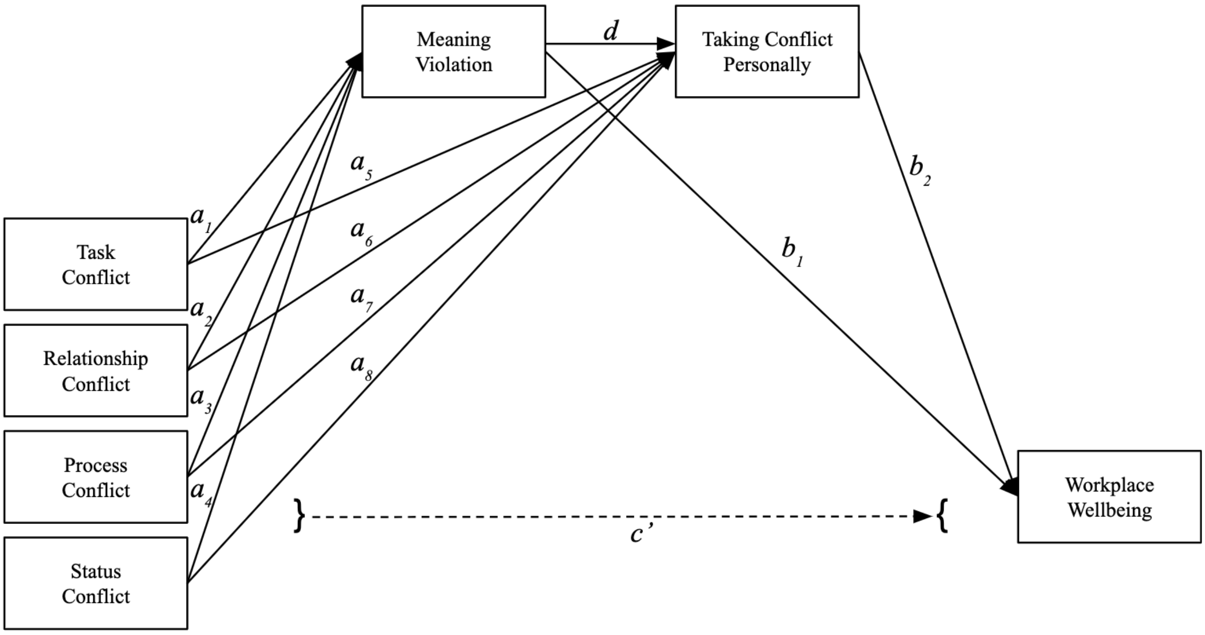

Meaning Violation
d
Taking Conflict Personally
a_5
b_2
a_1
Task Conflict
a_6
b_1
a_2
a_7
Relationship Conflict
a_8
a_3
Process Conflict
Workplace Wellbeing
a_4
c'
Status Conflict

Figure 3. Theoretical serial mediation model. Notes: Hypothesis 1 includes paths *d* and $b_{1\text{-}2}$. Hypothesis 2 includes all the *a*, *b*, *c*, and *d* paths. The *c'* paths have been aggregated in this figure for clarity. Workplace wellbeing consists of job satisfaction, co-worker satisfaction, organizational commitment, and (reversed) turnover intentions .

Figure 3 presents a summary of our theoretical model. Conflict of any type can increase meaning violation and TCP. The more meaning violation, the more TCP. The more meaning violation and TCP, the lower wellbeing (job satisfaction, co-worker satisfaction, organizational commitment, and (reversed) turnover intentions). We expect any effects of the various conflict types on wellbeing to be fully explained by TCP and meaning violation; hence the *c'* path in the model. This research makes several important contributions to the conflict literature. First, we elaborate on the antecedents and consequences of TCP by exploring the key cause of TCP and identifying the effects of TCP on wellbeing. Previous studies have focused on trait TCP (Hample & Cionea, 2010; Miller & Roloff, 2014; Wallenfelsz & Hample, 2010). We extend these studies by considering TCP as a state, examining a cause of TCP and how TCP affects job satisfaction, co-worker satisfaction, organizational commitment, and turnover intentions.

Second, we connect the conflict literature to a rich body of theory on meaning violation that can help us understand the mechanisms that turn a conflict from productive to problematic. Specifically, we argue that the negative effects of conflict are driven by meaning violation and that non-meaning-violating conflicts are much less likely to cause high TCP. By linking meaning violation to the conflict literature, we position conflict research in a rich theoretical landscape and provide a more robust explanation of the key mechanisms of conflict. This generates an exciting array of empirical questions and helps to explain mixed findings in past research.

Finally, conflict type has been a central theoretical lens through which conflict has been viewed for the last 25 years, even though research using conflict type has produced inconsistent results (de Wit et al., 2012). We use multiple methods to contrast the effects of conflict type with those of meaning violation and TCP. We demonstrate that meaning violation and TCP are the key drivers of the negative effects of conflict, and conflict type is less so. With this approach, we seek to provide an alternative theory of conflict that is more robust than conflict type and holds promise to explain the mixed findings of past research (Amason, 1996; de Wit et al., 2012).

Overview of Studies

In Study 1, we use vignettes to manipulate conflict type and meaning violation, with the violation centering on expectations of belonging. As in all studies, the outcome of interest is workplace wellbeing, which we operationalize as job satisfaction, satisfaction with co-workers, and organizational commitment, and (reversed) turnover intentions. This study allows us to test experimentally the causal role of meaning violation and to compare it with conflict type. Study 2 uses a similar design, but replaces the belonging violation with one involving social norms. In Studies 1 and 2, we predict that effects of conflict will *depend on* whether they violate meaning (which we manipulate) and the extent to which they arouse TCP (which we measure). Finally, Study 3 is an experience sampling study designed to test whether the effects of meaning violation and TCP are also observed in real workplaces with real employees. The measurement design of Study 3 allows for full tests of all hypotheses. All materials (including survey items, video stimulus, and vignette text), demographics, and supplemental analyses can be found at this OSF link[7])

Study 1: Belonging Meaning Violation

Study 1 aimed to distinguish the causal effect of conflict type from that of meaning violation. Participants completed an online study featuring vignettes describing conflict situations. We extensively pre-tested vignettes[8] to orthogonally manipulate conflict types and meaning violation. Much previous work on conflict type has been carried out in the field, resulting in the co-occurrence of different types (de Wit et al., 2012); our design allows for clear distinctions. Further, we argue that conflict in the field tends to covary with meaning violation. Thus, our experimental separation of conflict type and meaning violation allows us to focus on underlying drivers of responses to conflict. As a result, our hypothesized direct effects of conflict on workplace wellbeing should only be observed under conditions of meaning violation.

---

[7] The link can be viewed at https://osf.io/x8cwn/

[8] We pilot tested the vignettes through three different experiments to ensure that they effectively manipulated conflict type using existing conflict type scales. The results of these pilot tests are available from the first author.

Methods

Participants

Study 1 included 1,096 participants (452 males, 646 females, age 18-77, $M_{age} = 36.14$, $SD_{age} = 10.55$*)* recruited by a panel company. Participants were US citizens with full-time jobs. Sample size was determined *a priori*, using G*Power (Faul et al., 2009), to ensure sufficient power ($1 - \beta = .80$) to detect a small to medium-sized effect ($f^2 = .10$) of conflict type ($N = 4$) if one was present.

Procedure

The study used a between-subjects design with 5 (Conflict Type: TC vs RC vs PC vs SC vs none) X 2 (Meaning: maintained vs violated) levels. Participants first viewed a video in which one of 10 different workplace scenarios was read aloud while the corresponding text was displayed on the screen. The written scenario was also displayed again on the next page. After a standard introduction providing context, conflict type was manipulated as follows:

> Task conflict: *During a meeting, you and another team member disagree about what information should be included in the report you are preparing.*
>
> Relationship conflict: *During a meeting, you and another team member disagree about a joke you had both heard on the radio the day before*
>
> Process conflict: *During a meeting, you and another team member disagree about how long team meetings should last.*
>
> Status conflict: *During a meeting, you and another team member disagree about which of two different team members should be in charge.*
>
> No conflict: *During a meeting, you and another team member agree about each matter that you discuss.*

One of the two meaning manipulations was presented immediately afterward: *Throughout the discussions, the team member is always (dis)respectful and you know that they (don't) value you as a member of the team.* Together, the task conflict/meaning maintenance vignette said:

> "*Imagine you are a consultant and you are working together on a project with four other consultants who all have the same level of experience and skill as you. During a meeting, you and another team member disagree about what information should be included in the report you are preparing. Throughout the discussions, the team member is always respectful and you know that they value you as a member of the team.*"

After reading the vignette, participants were asked to imagine themselves in the situation and then complete measures of TCP and workplace wellbeing, followed by manipulation checks.

Measures

Participants answered questions using a 1 to 7 scale (1 = *Strongly disagree*; 7 = *Strongly agree*). Taking conflict personally (TCP; $\alpha = .92$) was measured using 6 items adapted from Hample and Dallinger (1995), such as "I took this situation personally." Each wellbeing ($\alpha = 0.98$) prompt started with "After this interaction…" and was operationalized as the mean of 4 component measures: organizational commitment (4 items; Meyer & Allen, 1997), e.g., "I would be happy to spend the rest of my career with my organization (the one in the scenario)"; co-worker satisfaction (3 items; Jehn et al., 2010), e.g., "I will be satisfied working with this workgroup"; job satisfaction (4 items; Agho et al., 1992), e.g., "I feel enthusiastic about my work"; turnover intention (reversed, 4 items; Kelloway et al., 1999), e.g., "I don't feel like being in this organization much longer."

Finally, as manipulation checks, we measured meaning violation and conflict type. Participants reported perceived meaning violation using 4 items from an earlier version of the interpersonal meaning violation scale from Chapter 2, such as "It is inappropriate for work teams to interact how my workgroup interacted" ($\alpha = .97$). We adapted 3 items from established measures to act as manipulation checks for each of the four conflict types: task conflict (Jehn et al., 2008; e.g., “We had task related disagreements”; α = .93), relationship conflict (Jehn et al., 2008; e.g., “There was fighting about personal issues in my workgroup”; α = .95), process conflict (Jehn et al., 2008; e.g., “My workgroup disagreed about the way to do things in the team”; α = .89), and status conflict (Bendersky & Hays, 2011; e.g., “My workgroup experienced disagreements due to members trying to assert their dominance”; α = .87).

Results

Participants in the meaning violation condition (*M* = 5.58, *SD* = 1.05) rated the situation as more meaning-violating than did those in the meaning maintenance condition (M = 1.83, SD = 0.94), *t*(1096) = 62.56, *p* < .001. Further, each of the manipulated conflict types was rated the highest in the respective conflict-type measure (see online supplement).

Table 6

Means and Standard Deviations of Workplace Wellbeing and Taking Conflict Personally by Condition

	Workplace Wellbeing				*TCP*			
	Meaning Maintenance		*Meaning Violation*		*Meaning Maintenance*		*Meaning Violation*	
Conflict Type	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Relationship	5.49_a	0.72	2.99_b	0.89	2.17_b	0.91	4.26_a	1.32
Status	5.37_a	0.84	2.95_b	1.06	2.23_b	0.87	4.17_a	1.38
Process	5.28_a	0.86	2.87_b	0.97	2.22_b	0.96	4.49_a	1.22
Task	$5.56_{a,c}$	0.69	2.87_b	1	2.18_b	0.90	4.38_a	1.28
No conflict	5.74_c	0.80	2.77_b	0.84	2.37_b	0.87	4.25_a	1.23

Note: Within rows, different subscripts indicate that means differ at p < .05.

We predicted that the effect of conflict on wellbeing would be mediated by TCP. We first compared the no-conflict condition (contrast weight = 4) with the conflict-type conditions (each contrast weight = -1). Results showed no effect of conflict (vs. none) on wellbeing, b = .02, *F*(1, 1088) = 1.57, *p* = .210 and no effect of conflict on TCP, b = .01, *F*(1,

1088) = 0.34, *p* = .559. (Means and standard deviations appear in Table 6.) However, since our scenarios had been constructed specifically to include both meaning violation and meaning maintenance, these results were not surprising. We next examined effects of TCP on wellbeing. Consistent with H1, TCP negatively predicted wellbeing, b = -.69, *F*(1, 1096) = 904.99, *p* < .001.

Consistent with H1, results confirm that wellbeing was significantly lower in the violation (M = 2.89) than in the maintenance (M = 5.49) condition, *F*(1, 1088) = 2415.53, *p* < .001. Though conflict did not predict TCP, the interaction of conflict (vs. none) and meaning violation was significant, *F*(1, 1088) = 954.44, *p* < .001, indicating that the effect of meaning violation on TCP was stronger in conditions of conflict (M_{viol} = 4.33 vs. M_{maint} = 2.20) than none (M_{viol} = 4.25 vs. M_{maint} = 2.37). Notably, conflict only fostered TCP when it violated meaning, a result consistent with H1. H1 implies an indirect effect of meaning violation on wellbeing via TCP; this was supported, 95%CI [-.26, -.17]. Finally, H2 predicted that the effects of each conflict type on wellbeing should be equal. As shown in Table 6, within levels of meaning violation, no differences were observed among conflict types in their effects on wellbeing (all *p*s > .33).

Discussion

The results of Study 1 support our argument that conflict type is not as important for predicting workplace wellbeing as meaning violation. Meaning violation increased TCP and resulted in large and significant reductions in self-reported workplace wellbeing. And when meaning violation was cleanly separated from conflict type, it became clear that conflict type--and perhaps even conflict itself--was less predictive of TCP and workplace wellbeing than was meaning violation.

Study 1 used belonging as the domain for meaning violation. Research on relationship conflict has focused heavily on having a sense of belonging and feelings of disrespect as triggers of relationship conflict (Jehn, 2014), such that a reader might wonder whether Study 1 merely added relationship conflict to another conflict type presented in the scenarios. To dismiss this alternative interpretation, Study 2 uses a meaning violation with no connection to belonging or respect.

Study 2: Social Norm Meaning Violation

Study 2 used a similar design to that of Study 1. The conflict scenario was paired with a manipulation of meaning violation that could not be easily mistaken for a breach of belonging expectations: Participants envisioned interacting with a counterpart who violated social norms by smearing yogurt all over themself. We join a long tradition by using a scenario that is unusual (Elster, 2011). Although it is unlikely that participants will ever be in control of a runaway trolley (Bazerman & Sezer, 2016; Thomson, 1985) or be faced with a dilemma as a prisoner (Luce & Raiffa, 1957; Park & DeShon, 2018) unusual scenarios allow us to manipulate important experimental characteristics without impacting others. Smearing yogurt on oneself is bizarre and even absurd; as such, we expected it to violate meaning, but without implicating a sense of belonging or acting as a challenge to the participant. If this kind of meaning violation can also prompt TCP, it would offer strong support for our theory.

Methods

Participants and Procedure

Study 2 included 128 US citizens with full-time jobs (65 males, 63 females, age 23--58, M_{age} = 32.73, SD_{age} = 7.25*)* recruited by a panel company. Sample size was determined a priori as in Study 1, but estimating a medium effect size (f^2= .25). The procedure for Study 2 was identical to Study 1 in every respect except the vignettes. We used the task-conflict vignette from Study 1, with a new meaning manipulation: *Throughout the discussion the team member you are talking with (eats yogurt) (rubs yogurt all over their face, hair, and ears) with a spoon.* For example, the vignette for meaning violation read:

> "*Imagine you are a consultant and you are working together on a project with four other consultants who all have the same level of experience and skill as you. During a meeting, you and another team member disagree about what information should be included in the report you are preparing. Throughout the discussion the team member you are talking with rubs yogurt all over their face, hair, and ears with a spoon.*"

After participants read and imagined being in the scenario, they completed the same measures as in Study 1 of TCP ($\alpha = .94$) and workplace wellbeing ($\alpha = .96$), followed by manipulation checks of interpersonal meaning violation ($\alpha = .95$), task conflict ($\alpha = .91$), relationship conflict ($\alpha = .90$), process conflict ($\alpha = .87$), and status conflict ($\alpha = .83$).

Results

Participants in the meaning violation condition ($M = 6.35$, $SD = 0.74$) rated the situation as more violating than did those in the meaning maintenance condition ($M = 3.67$, $SD = 1.48$), $t(126) = -12.98$, $p < .001$. The two conditions also differed significantly in the levels of workplace wellbeing ($M_{viol} = 2.93$, $SD_{viol} = 1.07$; $M_{manit} = 4.02$, $SD_{maint} = 1.03$; $t(126) = 5.87$, $p < .001$.) and TCP ($M_{viol} = 3.89$, $SD_{viol} = 1.86$; $M_{manit} = 2.67$, $SD_{maint} = 1.23$; $t(126) = -4.38$, $p < .001$.)

We predicted that the effect of conflict on wellbeing would be mediated by TCP. Consistent with that prediction, TCP negatively predicted wellbeing, b = -.38, $F(1, 126) = 53.68$, $p < .001$. Consistent with our predictions, results confirm that wellbeing was significantly lower in the violation (M = 4.02, SD = 1.03) than in the maintenance (M = 2.94, SD = 1.07) condition, $t(126) = 5.87$, $p < .001$. H1 implies an indirect effect of meaning violation on wellbeing via TCP; this was supported, 95%CI [-.29, -.08].

Discussion

Study 2 provides direct evidence for the role of meaning violation as the key construct that causes conflict to have a negative effect on workplace wellbeing. Even when the violation had nothing to do with respect, and even when the conflict situation was solely task-focused, we observed increased TCP and decreased wellbeing when participants encountered the violation. We find these results strongly encouraging: They support the causal sequence and key role of meaning violation that we have posited.

In Study 3, we sought to demonstrate that our effects appear in less controlled, real-world situations by collecting data on real conflicts in the field. Further, in the experimental studies, we treated meaning violation and conflict type as independent. It is possible, however, that they are correlated: that specific conflict types cause more meaning violation and TCP. To examine this possibility, while retaining the ability to disentangle effects of type and meaning violation, Study 3 uses experience sampling. By taking multiple measures over multiple days, we can differentiate between variance related to the individual and variance related to the events they have experienced (Podsakoff et al., 2003). We can also fully test predictions of all hypotheses.

Study 3: Experience Sampling Field Study

Participants completed online surveys twice daily for 10 days. In the afternoon, they reported on any conflict that occurred that day. The next morning, they reported their prospective wellbeing as they approached work that day.

Methods

Participants

Sample size was determined using a Monte Carlo simulation (Schoemann et al., 2017); this yielded a recommended sample of 138 participants to provide 0.95 power to detect an effect. We deliberately over-sampled to account for mortality; thus, 157 participants were included (69 female, 88 male, age 19--62, $M_{age} = 34.97$, $SD_{age} = 8.50$).

Procedure

Following other experience sampling studies (e.g. Fehr et al., 2017; Lanaj et al., 2014), data were collected in stages. First, participants completed a one-time report of demographics and workday start and end times, to facilitate survey delivery. Two days later, they began to receive daily surveys in the afternoon and morning. The afternoon survey asked participants to report task conflict, relationship conflict, process conflict, status conflict, TCP, and meaning violation. The morning survey asked them to report organizational commitment, co-worker satisfaction, job satisfaction, and turnover intentions. Collecting the IVs in the afternoon and the DVs the next day allowed us to reduce the risk of common method bias and provide a more rigorous test of the hypotheses (Podsakoff et al., 2003). Further, separating incident and wellbeing reporting provides a more conservative test, as the participant has time to recover from an incident and yet still reports a reduction in wellbeing the next day.

After-work survey. First, participants reported how much of each type of conflict (RC, SC, PC, TC) they had experienced that day. Next, participants reported on “feelings about work” using two TCP items from Studies 1 and 2 ($\alpha = 0.94$) as well as two items measuring meaning violation from the measure used in our earlier studies ($\alpha = 0.93$). Before the items measuring each conflict type, participants read a brief definition of that type. For example, for task conflict, they read, “Please answer the following about the level of task disagreement you experienced today at work (as opposed to non-work, personality-like disagreements which we call relationship disagreements).” To reduce participant fatigue, we created 2-item measures of each conflict type, adapted from Jehn et al. (2008) or, for status conflict, from Bendersky and Hays (2011); and 2-item versions of all measures used in Studies 1 and 2[9]. All questions used a 1 to 7 scale (1 = *Strongly disagree*; 7 = *Strongly agree*); all study measures are listed in our online supplement (*α* across days ranged from .88 to .95).

Before-work survey. Participants reported feelings “thinking about the day ahead...at work.” Measures comprised 2 items for each component of anticipated workplace wellbeing: organizational commitment, co-worker satisfaction, job satisfaction, and turnover intentions (α across days: .88 - .94).

Results

We received 1,380 full measures of a potential 1,570; a response rate of 87.90%. We tested all hypotheses using multilevel path modeling with time nested under persons. We interpret the level-1 (within-person) models, which examine responses to the daily conflict events that people are experiencing; the level-2 models reflect individual differences in how people respond to conflicts, which lie outside our interests. All model results appear in Table 7.

---

[9] We ran a pilot test with the 2-item measures to ensure an appropriate factor structure, acceptable reliability, and strong correlation with the full-length measures. The results of these pilot tests are available from the first author.

Table 7

Results of Multilevel Path Model

	Level 1				*Level 2*			
Path	*b*	*SE*	*Z*	*p*	*b*	*SE*	*Z*	*p*
MV -> Wellbeing	-0.07	0.02	-3.13	.002	0.24	0.63	0.38	.701
TCP -> Wellbeing	-0.05	0.01	-4.37	.000	-2.38	1.53	-1.55	.120
TC -> Wellbeing	-0.01	0.02	-0.43	.670	-0.86	1.08	-0.80	.423
RC -> Wellbeing	0.01	0.02	0.38	.703	1.84	1.72	1.07	.286
PC -> Wellbeing	-0.01	0.02	-0.86	.388	0.55	1.14	0.45	.654
SC -> Wellbeing	-0.03	0.02	-1.82	.070	-0.14	0.73	-0.19	.852
TC -> MV	0.06	0.02	3.08	.002	-0.44	0.18	-2.48	.013
RC -> MV	0.21	0.03	7.04	.000	0.73	0.14	5.21	.000
PC -> MV	0.08	0.02	3.75	.000	0.45	0.18	2.48	.013
SC -> MV	0.26	0.02	11.98	.000	0.19	0.13	1.49	.137
MV -> TCP	0.31	0.05	6.18	.000	0.33	0.18	1.84	.066
TC -> TCP	0.12	0.04	3.27	.001	-0.35	0.25	-1.41	.159
RC -> TCP	0.07	0.05	1.29	.196	0.85	0.24	3.59	.000
PC -> TCP	0.04	0.04	0.96	.336	0.46	0.25	1.83	.067
SC -> TCP	0.10	0.04	2.51	.012	-0.30	0.15	-1.08	.038

Notes: "MV" = Meaning Violation. All estimates are unstandardized.

Relationship and process conflict did not directly predict TCP. However, more task or status conflict predicted more TCP, which in turn negatively predicted workplace wellbeing. The indirect effect was significant for both task conflict, 95%CI[-.011, -.002] and status conflict 95%CI[-.011, -.001]. H1 was fully supported: All four conflict types predicted meaning violation, which in turn predicted wellbeing. The indirect effect was again significant for each conflict type (see Table 8). Meaning violation predicted TCP, and the indirect effect was significant with each conflict type (see Table 8), The sequential mediation predicted in H1 (and shown in Figure 4) was also fully supported via each of the conflict types (see Table 8).

Table 8

Indirect Effects of Conflict on Wellbeing via Meaning Violation and Taking Conflict Personally

	Conflict type→ MV→ Wellbeing	Conflict type→ MV→ TCP	Conflict type→ MV→ TCP→ Wellbeing
Task conflict	[-.008, -.0005]	[.006, .034]	[.002, .0002]
Relationship conflict	[-.025, -.005]	[.038, .094]	[.006, .001]
Process conflict	[-.010, -.001]	[.009, .038]	[.002, .0003]
Status conflict	[-.030, -.006]	[.053, .111]	[.007, .002]

Note: Numbers inside brackets are lower and upper limits of the 95% confidence intervals

Finally, H2 predicted that although conflict predicts meaning violation, TCP, and workplace wellbeing relative to the absence of conflict, conflict type is less predictive of TCP and wellbeing than is meaning violation. To test this prediction, we specified two models (see supplementary materials): a model that was free to vary and a model in which the paths to the DVs were constrained to be equal. This essentially compares our findings--where path estimates suggest a larger effect of TCP and meaning violation than of conflict type on wellbeing--with a null-hypothesis model where these effects are equal. Our unconstrained model (AIC = 25,901; BIC = 26,105) exhibited a better fit than the constrained model (AIC = 25,907; BIC = 26,058) $\chi^2_{\text{diff}} = 25.643$, $p < 0.01$. In short, when we consider meaning violation and TCP separately from conflict type, meaning violation and TCP are the most significant predictors of workplace wellbeing.

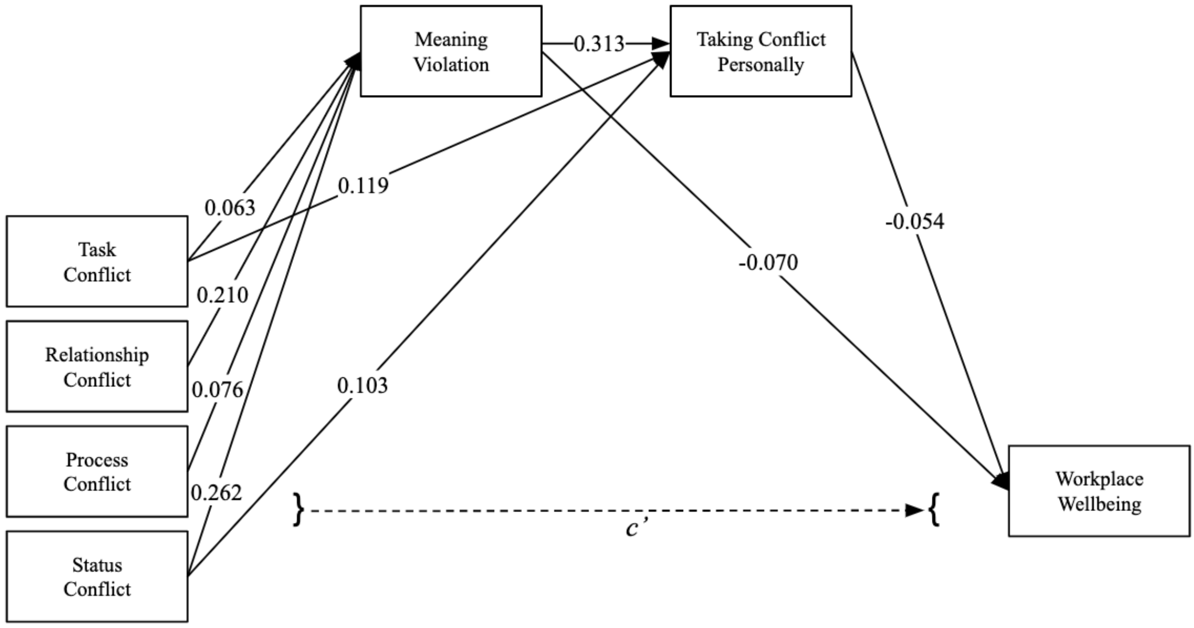

Meaning Violation
0.313
Taking Conflict Personally
Task Conflict
Relationship Conflict
Process Conflict
Status Conflict
0.063
0.119
0.210
0.076
0.262
0.103
-0.070
-0.054
Workplace Wellbeing
c’

Figure 4. Path model of serial mediation of conflict, meaning violation, taking conflict personally, and workplace wellbeing. Note: All paths shown are significant at $p < .01$

General Discussion

Two experiments and an experience sampling study examined how meaning violation and TCP relate to workplace wellbeing, compared with the dominant paradigm of conflict type. Consistent with predictions derived from the meaning maintenance model (Heine et al., 2006), we found that meaning violations are more predictive of wellbeing than is any conflict type and that meaning violation can occur in the context of any type of conflict. The effect of meaning violation on wellbeing via TCP was robust across 3 studies and 2 methodologies.

Our work provides a relatively robust test of conflict type theory and presents an alternative that can resolve paradoxes identified in past meta-analyses of conflict-type research (De Dreu & Weingart, 2003; de Wit et al., 2012). For example, past researchers expected to find that relationship conflicts produce worse outcomes than task conflicts, but evidence is inconsistent. Our work makes clear that conflict type is not as important as individuals’ perceptions of the conflict--specifically, whether their sense of meaning is violated by the conflict, leading them to take it personally.

Research on TCP is substantially represented in the communications literature; however, the bulk of that work focuses on TCP as a trait. The current paper extends this work by operationalizing TCP in its state form. Though previous research suggested that this was feasible (Hample, 2016), we are not aware of studies using the state form of TCP. We demonstrate the potential for other researchers to adopt this construct in the future.

Finally we contribute to the conflict literature by answering the call for more research into the processes that cause conflict to be problematic and how differing perceptions of a conflict event might affect the impacts of a conflict (Greer & Jehn, 2007; Jehn, 2000). We do so with attention to both theoretical and methodological rigor. From a theoretical standpoint, we draw on important and well established social-psychological processes, using a deductive approach to explain why conflict reduces wellbeing rather than the observational-inductive approach that undergirded past conflict-type theory (Jehn, 2014). From a methodological standpoint, our experimental studies offer rigor and precision (Aguinis & Bradley, 2014), and experience sampling data offer rich realism (Fisher & To, 2012).

Although we sought to demonstrate that conflict type is less predictive of workplace wellbeing than meaning violation, we note that the utility of the conflict type construct remains. To be able to identify the topic of conflict may be useful for researchers to target interventions that reduce meaning violation in the domain of the conflict. For example, meaning violations that are caused in a status conflict may respond to different interventions or moderation effects than meaning violations caused in a process conflict. Furthemore, for conflicts bounded to a specific context, such as process conflicts, the use of conflict type theory can be a more finely tuned tool for investigation. We are not saying that conflict type theory should be discarded because it is less predictive of outcomes. Rather, conflict type theory can be used to clearly define or describe a particular conflict, while meaning violation should be recognized as driving the pattern of outcomes. Of course, future research is also needed to confirm that meaning violation is a better predictor of outcomes beyond workplace wellbeing.

Practical Implications

Past conflict theory suggests that a workplace without conflict is at risk of having so much uniformity that new ideas are not explored (Nemeth et al., 2001) potentially producing the disastrous outcomes seen at the Bay of Pigs or Challenger disaster (Moorhead et al., 1991). Taken to its extreme, this might imply a choice between a workplace with no conflict, where new ideas are rarely introduced, and old patterns of behavior are doomed to repeat themselves; and a workplace where conflict is permitted but wellbeing suffers. Rather, we suggest it is possible to have conflict of any type without harm to wellbeing, and it is possible for conflict of all types to be problematic to wellbeing. The key issues are meaning violation and taking conflict personally.

We hope this work will prompt individuals to reexamine the utility of their own meaning frameworks. Asking, “Does it really serve me to have such strict rules for how others must act around me?” is a way to desensitize oneself to potential violations. For example, a student in an MBA negotiation course reflected on how she updated her meaning framework to allow disagreement in a negotiation: “When I say to myself ‘they are just negotiating’ I don’t find it as confronting...it is somehow more acceptable to disagree.” The student had previously been overwhelmed by disagreements in negotiations, but reframing the conflict as acceptable and part of the negotiation process helped her to feel less reactive and stop seeing negotiation as violating meaning.

Managers may find it helpful to consider the meaning frameworks of team members. If team members see disagreement as “bad,” managers can recognize this as a potentially harmful aspect of their meaning framework. Wellbeing may be increased by exploring beliefs about disagreement (Sanchez-Burks et al., 2008). This may be more constructive than trying to reduce or eliminate conflict (Johnson et al., 2000), which might simply reify the “conflict=bad” meaning framework and introduce further conflicts, particularly if some staff members are more open to disagreements. Instead, managers might foster open discussion norms (Jehn & Mannix, 2001) focusing on how conflict should be managed to reduce the risk of meaning violation, improve wellbeing, and reduce staff turnover.

We caution practitioners that our findings are not meant to suggest that a workforce reporting low wellbeing should be convinced to see mistreatment as acceptable and right. If staff see conflict as meaning-violating, it is important to understand their felt needs rather than realigning meaning frameworks to cast violations in positive terms. Having said that, our research points conflict management practitioners toward a promising line of interventions. By helping people in conflict to better understand their meaning frameworks, and better understand the meaning frameworks of those with whom they are in conflict, we can highlight where meaning violations occur. Practitioners can coach participants to avoid latent or unforeseen meaning violations. This strengthens the importance to “seek first to understand, then to be understood” (Bouquerel, 1912).

Limitations and Future Directions

Our work is not without limitations. First, each vignette we used to manipulate conflict type only represented one very specific conflict event, which limits generalizability over stimuli (Westfall et al., 2015). In the future, a wider variety of scenarios representing different conflict types might be used. Second, though Study 1 was over-powered to detect main effects, some scholars argue that detecting interactions requires far more observations (see, e.g., Aguinis, 2002; Shieh, 2009). Thus, it is desirable to replicate our findings with even larger samples. Cross-cultural generalizability may be improved by using samples beyond the US.

Third, the self-report measures used in Study 3 are vulnerable to common method variance. Future studies could benefit from using more objective measures of meaning violation. For example, psychophysiological measures such as skin conductivity, pupil dilation, or cardiovascular reactivity (Townsend et al., 2013) can indicate violation. The use of psychophysiological measures would provide an exciting opportunity to differentiate consciously-perceived and subconscious reactions (Mendes et al., 2007).

Finally, our research did not include any performance outcomes, but these could be useful. An external measure of performance could strengthen our findings by further reducing the potential impact of common method variance. Further, though we found negligible effects of conflict type on wellbeing once TCP and meaning violation had been taken into account, performance may differ. Finally, though meaning violation is harmful to workplace wellbeing, it may be helpful for performance. For example, meaning violation at work might cause someone to get angry, which may increase effort so as to restore a sense of mastery. Future research should examine effects of meaning violation and TCP on both individual and team performance.

Conclusion

Common advice for conflict situations is, “Don’t let it become personal.” Scholars advise that task conflict is OK, but relationship conflict is not. But how exactly can an individual act on these insights? We have shown a clearer path. The most powerful way to avoid having a conflict taken personally is to become clearer about what triggers personalization, and the meaning violation perspective offers clarity. We hope that this paper may begin to lay a foundation for vital future research on this topic.

Chapter 4: Thesis General Discussion

Humans have an innate drive for a consistent sense of meaning (Heine et al., 2006). When the world does not match up with someone's expectations of how the world should be, they experience an unpleasant and aversive state. I believe that meaning maintenance is a central driving force for many workplace phenomena. Yet, despite the growth of meaning maintenance theory in social psychology, it has received insufficient attention in organizational behavior research. The goal of this dissertation has been to examine the construct of interpersonal meaning violation in the workplace. In Chapter 2, I made arguments regarding the importance and universality of the interpersonal meaning violation construct in phenomena at work. In the same chapter, I showed what constitutes interpersonal meaning violation as well as some constructs that are related to it. In Chapter 3, I applied the meaning violation construct to a specific workplace phenomenon that helps us understand how previous explanatory frameworks may have been inadequate because of a failure to consider interpersonal meaning violation.

Contribution

This dissertation makes an important contribution to organizational behavior theory by applying the meaning maintenance model to social processes at work. Although social processes were ostensibly addressed by Festinger's early conceptualization of cognitive dissonance (Festinger, 1962), this thesis represents an advance in empirical understanding of how interpersonal meaning violation can affect key workplace outcomes such as negative emotion, stress, rumination, psychological withdrawal, emotional exhaustion, organizational citizenship behaviors, work engagement, and satisfaction.

I demonstrated the central role of meaning violation in conflict, connecting the conflict literature to a rich body of theory that can help researchers understand why some conflict is productive while other conflict is problematic. Specifically, I argue that the negative effects of conflict are mediated by meaning violation and that conflicts that do not violate a person's meaning are much less likely to cause someone to take a conflict personally. I show the connection between the meaning maintenance model and the broader conflict literature and thus create a bridge to a rich body of existing research that has scarcely been used as a lens to understand interpersonal conflict.

In addition to highlighting the importance of interpersonal meaning violation, I also elaborated on the antecedents and consequences of taking conflict personally (TCP). I showed that interpersonal meaning violation is a key cause of TCP and identified the effects of TCP on workplace wellbeing. In many books and articles on conflict, practitioners are implored to “not take the conflict personally” (Fisher et al., 2011; Hample & Cionea, 2010). Thus, TCP seems an especially important construct to operationalize and explore. Previous studies on TCP have focused on the trait-level effects of TCP (Hample & Cionea, 2010; Miller & Roloff, 2014; Wallenfelsz & Hample, 2010). This dissertation extends these studies by considering TCP as a state, revealing which situations cause an individual to experience high TCP and how TCP affects workplace wellbeing.

The research in this dissertation is of scholarly importance because for the last 25 years conflict type has been a central theoretical lens through which conflict has been viewed, even though research using conflict type has not formed a settled understanding of what causes harm in interpersonal conflict (de Wit et al., 2012). Using multiple methods (vignette experiments and experience sampling), I contrasted the effect of conflict type with that of meaning violation and TCP. I demonstrated that meaning violation and TCP are the key drivers of negative effects of conflict, and conflict type is not. With this approach, I sought to challenge the dominant paradigm of conflict type and provide an alternative theory of conflict that is more robust and holds promise to better explain the findings of past research (Amason, 1996; de Wit et al., 2012).

In addition to the contribution made by demonstrating the importance of interpersonal meaning violation as a construct for consideration in organizational research, I created and validated a measure of interpersonal meaning violation. This provides a tool for other researchers to better study interpersonal meaning violation. For example, researchers who are studying a negative workplace behavior but struggling to find the expected effects can use the interpersonal meaning violation scale to identify whether that negative workplace behavior is actually causing interpersonal meaning violation. If the behavior is not causing interpersonal meaning violation, then it is likely that they either have an unusual sample in which the behavior is considered acceptable or the behavior does not tend to cause meaning violation; in this case, the behavior is unlikely to have negative effects on workers. This could be especially helpful in scale development for specific forms of workplace victimization or workplace incivility. For example, if a scale intended to measure a negative workplace behavior does not correlate significantly with the interpersonal meaning violation scale, it is unlikely to be useful for research that focuses on workplace wellbeing. The interpersonal meaning violation scale can be efficiently and cost-effectively administered by researchers to better understand what causes negative workplace behaviors to result in negative outcomes. In the future, this may bring to light how important meaning maintenance is to many other workplace constructs. Researchers have not previously paid enough attention to developing a validated measure of interpersonal meaning violation; thus, until now, research in this area has been difficult to pursue.

Implications

Interpersonal meaning violation provides a flexible and robust perspective for understanding phenomena at a theoretical level as well as highlighting potential implications for applying the theory to improving one's personal life.

Implications for Theory

An important theoretical implication is that interpersonal meaning violation is likely to be a key factor in understanding the mechanism of harm for a range of negative workplace constructs. For example, although the workplace victimization literature features a proliferation of constructs (Aquino & Thau, 2009), a unifying theoretical link is that interpersonal meaning violation is likely to drive how different forms of victimization affect wellbeing. For example, if someone does not perceive bullying behaviors to be meaning violating, they will not be as likely to cause harm. Thus, researchers who deal with specific forms of negative workplace behavior can position their work in the broader literature by demonstrating that the behaviors that they study cause harm by the same meaning violation mechanism as a variety of other problematic workplace behaviors.

Another area of theory that may be affected by a deeper understanding of interpersonal meaning violation is humor. A prominent humor theory, *benign violation theory* (Warren et al., 2021), posits that something is funny when it is simultaneously violating (i.e. there is a mismatch between one's meaning frame and what "should" be happening) and benign (i.e. it happened a long time ago, to someone distant from oneself, or there is an alternative norm with which one can make an appraisal). In my framing of interpersonal meaning violation, I assumed that meaning violations were not simultaneously benign. However, the inclusion of benign appraisals prompts interesting theoretical questions that allow us to answer calls for research (Doshy & Wang, 2014; Thrasher et al., 2020) to consider both the victim and the perpetrator of workplace incivility. Consider, for example, bullying: The victim experiences a meaning violation because their meaning framework includes an expectation that they should not have their clothes nailed to the wall of the workshop while they are still wearing them, while the perpetrator thinks this behavior is hilarious. Due to the amusement experienced by the perpetrator in this scenario, benign violation theory posits that the perpetrator views the violation as benign. Perhaps the perpetrator lacks empathy or has "othered" the victim such that psychological distance makes them consider the behavior benign (McGraw & Warren, 2010). Perhaps they consider the behavior benign because they are only considering the inconvenience of being nailed to a wall ("we'll get him down soon") and not the suffering that is experienced by someone being mocked at work. The possibility that some workplace incivility is driven by appraising behavior as benign provides an exciting lens through which to study victimization from the perpetrator's perspective.

Implications for Individuals

My interest in interpersonal meaning violation was strongly driven by the fact that negative workplace phenomena create real problems for real people, and I am motivated to use my research to help address those problems. The interpersonal meaning violation construct offers a framework for people to change the way they think and talk about issues at work. Thus, for those who wish to practically apply this research, I present the following considerations[10]:

---

[10] Chapters 2 and 3 were written with the expectations of the target journals in mind and thus focus on practical implications for managers and the research community. However, during the course of the dissertation I have given a great deal of thought to how an individual might apply the knowledge from this research to his or her

No one knows what I am thinking.

If I am experiencing suffering because my meaning framework says that someone I am interacting with knows what is the “right” thing to do (or not do) for me, this is flawed. Research using Kenny’s (1994) social relations model has explored, among both high- and low-acquaintance groups, how effectively people can estimate the thoughts of others. This large body of research has convincingly and repeatedly demonstrated that people do not possess a very accurate estimate of the thoughts of others. Thus, although I am free to continue thinking that people should know what the “right” way to act around me, I would do well to acknowledge that the more my meaning framework is built on the assumption that other people know what I am thinking, the more I am likely to experience meaning violation and the resultant unpleasant state.

I do not know what others are thinking.

The preamble to the interpersonal meaning violation measure says that people may judge their meaning violation on “any thought, attitude, behavior, or action,” and initially this seems odd because people cannot notice the thoughts or attitudes of others because they are internal to the individual. However, this is central to my second point. If I am experiencing meaning violation based on metaperceptions--what I think others are thinking of me--this is flawed. Although the evidence from the social relations model about the inaccuracy of estimates of other’s thoughts is compelling, research on *the spotlight effect* (Gilovich et al., 2000) provides further evidence. The spotlight effect holds that people massively overestimate how much people are noticing them. Said another way, if I think people are thinking unpleasant things about me, I am probably wrong because they are not thinking

---

own life. Here, I draw on my own research and that of others to present four principles that can be used to apply the knowledge from this dissertation to one’s life.

about me at all. In the same manner as the previous point, I am free to continue thinking that I know what others are thinking and allowing those thoughts to breach my meaning framework, but the more I do so, the more I will experience meaning violation and the resultant unpleasant state.

My meaning framework defines what will hurt me.

If I have a very rigid meaning framework about how the world should be and about how I should be treated, I am more likely to experience meaning violation and the unpleasant state that comes from it. If a person is willing to let go of one "should," they have one less potential source of meaning violation and thus one less potential source of unpleasantness. Someone may decide that some of their meaning frameworks are very important to them and they are willing to be sad or hostile to remind them that they need to change the situation, but it is helpful to see the unpleasant feeling for what it is: a signal that their meaning framework has been breached. I can try to change the way the world acts or I can choose to change my rule for the world. In the words of Victor Frankl: "When we are no longer able to change a situation, we are challenged to change ourselves" (Frankl, 1959, p. 117). It is generally easier to change something that one is in charge of (one's meaning framework) than to change the world. But in some instances, for example issues of physical safety, one may choose to keep their meaning framework intact and use the unpleasant state as motivation to move away from or against the source of the threat to their meaning framework.

Other people's meaning framework defines what will hurt them.

It seems reasonable, after reading the above research, to think "everyone should have less rigid meaning frameworks," but this can easily become another rigid rule that sets one up to experience meaning violation each time *someone else* experiences meaning violation. That is double the unpleasantness, because when they experience meaning violation, so will I. It is possible to cultivate a sense of delight (or at least acceptance) that people have vastly (or subtly) different meaning frameworks from one's own. It takes practice and it takes time, but one can train oneself to accept that everyone's thoughts will not always be aligned with one's own. As other people's meaning frameworks define what will hurt them, two implications arise: First, I should seek to understand what other people's meaning frameworks are if I want to be a source of good rather than pain. I will not know someone's meaning framework if I do not listen. Second, most of the time, choosing to act in accordance with another's meaning framework is a worthwhile sacrifice in the name of compassion. It can be hard to treat someone the way they want to be treated when my meaning framework says that what they care about is not important--or, worse, clashes with an unexamined meaning framework of my own--but it might be worth it.

In this section, I have provided four considerations for those who wish to apply the findings from this research to their own lives. These four considerations are not an exhaustive list. Rather they are the ideas that I endeavor to keep in mind when navigating difficult interpersonal situations. Hopefully the empirical work in this dissertation has provided evidence of the importance of interpersonal meaning violation, which will motivate discussion about how best to apply these ideas to one's life.

Limitations

This dissertation is not without limitations. For example, the bulk of the data come from self reports, which may inflate the magnitude of some of the relationships. I took a number of steps to reduce methodological artifacts, such as collecting data from multiple sources, collecting data with time delays, controlling the presence of method effects using structural equation modeling, and collecting data over multiple days using an experience-sampling paradigm. Research using cross-sectional methods should not make causal inferences (Podsakoff et al., 2013). Although I use cross-sectional methods in a number of studies in two studies I use experimental designs that allow me to make causal inferences. In both the CyberBall experiment from Chapter 2 and the vignette experiments in Chapter 3 I used experimental methods which provides evidence for the causal effects of interpersonal meaning violation. However, further research is still required for constructs where only correlational evidence was gathered.

Another limitation is the use of participants from western nations (Henrich et al., 2010). All the participants in my experiments came from either the US or UK; thus, my research can only be generalized to similar populations. Furthermore, the interpersonal meaning violation scale has not been validated in other cultures (see a more in-depth discussion of this issue in the limitations section of Chapter 2), and thus use outside of western nations without further cross-cultural validation efforts should be viewed with caution.

Future directions

Future research that focuses on performance outcomes would expand our understanding of the effect of interpersonal meaning violation. In this dissertation, I expected that the most significant outcomes from interpersonal meaning violation would be on workplace wellbeing, due to the immediate and visceral effects meaning violation has on individuals. Thus, I focused on a variety of potential aspects of workplace wellbeing, including stress, rumination, job satisfaction, coworker satisfaction, organizational commitment, work engagement, and psychological withdrawal. The use of workplace wellbeing outcomes answers the call from organizational psychology scholars for research that focuses on the wellbeing of workers rather than focusing on performance (Lefkowitz, 2017). There has been a tendency in the organizational psychology literature to focus on outcomes that seem important to for-profit organizations, such as performance or creativity, while focusing comparatively less on the wellbeing of workers (Zickar, 2010). The Society of Industrial and Organizational Psychology mission statement starts with the objective "to enhance human well-being" (SIOP, 2019) before mentioning performance. Although I selected workplace wellbeing variables because they are a logical outcome of the interpersonal meaning violation construct, I was also motivated by the potential to benefit humanity. I acknowledge that increased performance may also be socially useful by generating profit that can provide workers with salaries. Future research should directly examine the effects of interpersonal meaning violation on performance.

Future research could consider individual differences that cause people to a) have more rigid meaning frameworks that are thus more frequently violated; or b) make construals of events that are more likely to be meaning violating. For example, people high in openness to experience (McCrae & Sutin, 1997) may have less rigid meaning frameworks (fewer "shoulds"), which may result in fewer instances of meaning violation. Or perhaps those high in neuroticism (Tacket & Lahey, 2017) or dangerous world view (Perry et al., 2013) may process information from events with a greater tendency to experience meaning violations. These and other individual differences could increase the likelihood that someone will experience interpersonal meaning violation more frequently or with greater intensity even if they are exposed to the same life events.

Another area that requires further research is the unexpected results I found with *organizational citizenship behaviors*. Organizational citizenship behavior (OCB) is “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization” (Organ et al., 2005, p. 8). Without OCB, the performance of companies would decline significantly (Koys, 2001; Organ, 2018; Walz & Niehoff, 2000). I drew on the target similarity model (Lavelle et al., 2007) for my predictions about OCB. The target similarity model proposes that people’s OCB varies in who benefits from the behavior. It suggests that violations from one source (for example, a supervisor) will result in withholding of OCB that benefits that source (for example, not providing helpful information to one’s supervisor). To a large extent, I found these effects. One relationship that I did not predict, but that is worthy of further research, was that interpersonal meaning violation from one’s employees seemed to reduce OCB directed towards one’s customers. Perhaps this represents a spillover effect whereby those with difficult staff do not have energy to provide discretionary OCB, and customers are the first to suffer. This spillover effect of employee meaning violation affecting customer OCB seems to be unique, in that customers who are meaning violating do not seem to affect OCB directed at one’s coworkers or supervisor. Future research is needed to confirm this relationship and explore alternate explanations of the effect. The effect sizes that I found for the relationship between interpersonal meaning violation and most forms of OCB were small. Thus, I would recommend that future research use a larger sample size when studying this relationship to ensure they have the power to detect an effect.

In a great deal of the literature that the meaning maintenance model draws on, experiments are set up to capture fluid compensations (Proulx & Inzlicht, 2012a). These include, for example, a subtle meaning violation, such as researchers surreptitiously switching places, increasing participant's reinforcement of conservative values (Proulx & Heine, 2008). However, in the domain of interpersonal meaning violation, the source of the meaning violation is not obscured; rather, the source of the violation (the person doing the violating) is naturally apparent to the perceiver of the violation. Thus, interpersonal meaning violations are inherently more concrete than the subtle manipulations often used in meaning maintenance research (e.g., Proulx & Heine, 2008). More concrete violations tend to cause more direct responses (Tullett et al., 2011) and those responses tend to be targeted at the source of the meaning violation (Stone et al., 1997). Thus, although the meaning maintenance model suggests multiple ways that a person can respond to a meaning violation, I believe that responses that are focused on the source of the violation are most likely in cases of interpersonal meaning violation.

Although I theorize that fluid compensation is unlikely in instances of interpersonal meaning violation I do not discount the potential for fluid compensation in all instances. For example, Zhu et al. (2012) propose that if someone is exposed to a justice failure when they believe the world should be just, it may result in affirmation of other identity domains. In Experiment 4 of Zhu's dissertation (2008), he tests this proposal and finds that students high in environmental identity who are exposed to a meaning violating story about a justice failure are more likely to affirm their identity by purchasing environmentally friendly products[11]. This is consistent with the fluid compensation theory: Meaning violation in one domain (justice) results in affirmation in another domain (environmental stewardship). In future research, an alteration to this design could be used to test my prediction that people preferentially move against the salient source of the meaning violation rather than using fluid compensation: Participants could be provided with an opportunity to speak out against the source of the meaning violation (the person featured in the justice failure scenario) and then researchers could observe whether the fluid compensation persists. I predict that an opportunity to affirm one's meaning framework by passing judgment on the transgressor would significantly reduce or eliminate the fluid compensation effect.

Future research should investigate how an understanding of meaning maintenance may inform interventions to increase wellbeing at work. A number of levels of intervention warrant exploration. Firstly, interventions that focus on developing calming skills at the psychophysiological level, such as meditation, yoga, or cardiovascular interval training, may have significant effects in allowing someone to self-soothe after an interpersonal meaning violation. Secondly, interventions that identify one's inner dialogue as merely a mental representation and not necessarily reality, such as acceptance and commitment therapy (Hayes et al., 2006), may be helpful by reducing the extent to which people interpret their thoughts as reality that must be responded to. Unpleasant or difficult thoughts are likely to do less harm if they are recognized as just thoughts. Thirdly, interventions that focus on teaching people to make cognitive reappraisals so that the stimulus that they thought was meaning violating now takes on new, less problematic meaning, could be helpful. Cognitive reappraisals may allow people to consider their experiences in a different light, giving new meanings to events that are thus less meaning violating potentially resulting in reduced harm to the individual. Lastly, interventions that allow a willing person to examine their meaning frameworks and consider which of their “shoulds” is helping them and which are harming may be helpful in reducing the frequency of interpersonal meaning violation by reducing the rigidity of people’s meaning frameworks.

---

[11] Based on (Shieh, 2009), I suspect that the experiment is underpowered to detect the interaction effects that are hypothesized. This should be considered by the interested reader if attempting to reproduce the results.

Conclusion

Marcus Aurelius encouraged himself to begin each day by acknowledging that: “Today I shall be meeting with interference, ingratitude, insolence, disloyalty, ill-will, and selfishness” (Aurelius, 2002). It seems from this acknowledgement he sought to have less “shoulds” about how people must act for him to be well in the world. Whether one is the ruler of Rome or a waiter at the local Olive Garden, if we interact with others we will experience meaning violations. The evidence presented in this dissertation suggests that interpersonal meaning violation has significant negative effects on people in the workplace. Thus, developing a better understanding of the importance of interpersonal meaning violation in human processes and workplace interactions can inform future research and practice to protect workplace wellbeing and improve lives. The development and validation of the interpersonal meaning violation scale provides a tool for researchers to better understand this phenomenon and to develop interventions to reduce the severity and frequency of meaning violation in the workplace.

Appendix

Interpersonal Meaning Violation Scale

Supervisor(s)

The following statements refer to how your supervisor(s) acted [in the last two weeks/today/in the scenario]. To "act" can refer to any thought, attitude, behavior, or action that you noticed your supervisor(s) engage in.

It is wrong for supervisors to act the way my supervisor(s) acted.
It is inappropriate for supervisors to act the way my supervisor(s) acted.
My supervisor(s) acted in a way that is improper for someone in this kind of role.
For someone in this kind of role, my supervisor(s) acted poorly.

Employee(s)

The following statements refer to how your employee(s) acted [in the last two weeks/today/in the scenario]. To "act" can refer to any thought, attitude, behavior, or action that you noticed your supervisor(s) engage in.

Note: "employee" refers to any person that you supervise or have authority to give instructions to.

It is wrong for employees to act the way my employees(s) acted.
It is inappropriate for employees to act the way my employee(s) acted.
My employee(s) acted in a way that is improper for someone in this kind of role.
For someone in this kind of role, my employee(s) acted poorly.

Customers(s)

The following statements refer to how your customer(s) acted [in the last two weeks/today/in the scenario]. To "act" can refer to any thought, attitude, behavior, or action that you noticed your customer(s) engage in.

It is wrong for customers to act the way my customer(s) acted.
It is inappropriate for customers to act the way my customer(s) acted.
My customer(s) acted in a way that is improper for someone in this kind of role.
For someone in this kind of role, my customer(s) acted poorly.

Coworker(s)

The following statements refer to how your coworker(s) acted [in the last two weeks/today/in the scenario]. To "act" can refer to any thought, attitude, behavior, or action that you noticed your coworker(s) engage in.

Note: "coworkers" does not include your supervisor or people that you supervise.

It is wrong for coworkers to act the way my coworker(s) acted.
It is inappropriate for coworkers to act the way my coworker(s) acted.
My coworker(s) acted in a way that is improper for someone in this kind of role.
For someone in this kind of role, my coworker(s) acted poorly.

References

Agho, A. O., Price, J. L., & Mueller, C. W. (1992). Discriminant validity of measures of job satisfaction, positive affectivity and negative affectivity. *Journal of Occupational and Organizational Psychology*, *65*(3), 185–195.

Aguinis, H. (2002). Estimation of Interaction Effects in Organization Studies. *Organizational Research Methods*, *5*(3), 207–211.

Aguinis, H., & Bradley, K. J. (2014). Best Practice Recommendations for Designing and Implementing Experimental Vignette Methodology Studies. *Organizational Research Methods*, *17*(4), 351–371.

Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, *39*(1), 123–148.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423.

Anderson, J. C., & Gerbing, D. W. (1991). Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their substantive validities. *The Journal of Applied Psychology*, *76*(5), 732.

Aquino, K., Sheppard, L., Watkins, M. B., O'Reilly, J., & Smith, A. (2014). Social sexual behavior at work. *Research in Organizational Behavior*, *34*, 217–236.

Aquino, K., & Thau, S. (2009). Workplace victimization: aggression from the target's perspective. *Annual Review of Psychology*, *60*, 717–741.

Aronson, J., Cohen, G., & Nail, P. R. (1999). Self-affirmation theory: An update and appraisal. In E. Harmon-Jones & J. Mills (Eds.), *Cognitive dissonance: Progress on a pivotal theory in social psychology.* (pp. 127–147). American Psychological Association.

Aurelius, M. (2002). *Meditations: A New Translation*. Random House Publishing Group.

Baptiste, N. R. (2008). Tightening the link between employee wellbeing at work and performance. *Management Decision*, *46*(2), 284–309.

Barki, H., & Hartwick, J. (2004). Conceptualizing the construct of interpersonal conflict. *International Journal of Conflict Management*, *15*(3), 216–244.

Baron, R. A. (1991). Positive effects of conflict: A cognitive perspective. *Employee Responsibilities and Rights Journal*, *4*(1), 25–36.

Baumeister, R. F. (1991). *Meanings of Life*. Guilford Press.

Bazerman, M. H., & Sezer, O. (2016). Bounded awareness: Implications for ethical decision making. *Organizational Behavior and Human Decision Processes*, *136*, 95–105.

Bechtoldt, M. N., De Dreu, C. K. W., Nijstad, B. A., & Zapf, D. (2010). Self-concept clarity and the management of social conflict. *Journal of Personality*, *78*(2), 539–574.

Behfar, K. J., Mannix, E. A., Peterson, R. S., & Trochim, W. M. (2010). Conflict in Small Groups: The Meaning and Consequences of Process Conflict. *Small Group Research*, *42*(2), 127–176.

Bendersky, C., & Hays, N. A. (2011). Status conflict in groups. *Organization Science*, *23*(2), 323–340.

Berdahl, J. L., & Aquino, K. (2009). Sexual behavior at work: Fun or folly? *The Journal of Applied Psychology*, *94*(1), 34–47.

Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, *73*(1), 39–61.

Bianchi, R. (2018). Burnout is more strongly linked to neuroticism than to work-contextualized factors. *Psychiatry Research*, *270*, 901–905.

Bing, M. N., Whanger, J. C., Davison, H. K., & VanHook, J. B. (2004). Incremental validity of the frame-of-reference effect in personality scale scores: a replication and extension. *The Journal of Applied Psychology*, *89*(1), 150–157.

Blascovich, J. (2013). The biopsychosocial model of challenge and threat. In Derks, B., Scheepers, D., & Ellemers, N. (Ed.), *Neuroscience of prejudice and intergroup relations* (pp. 229–242). Taylor & Francis.

Blascovich, J., Vanman, E., Mendes, W., & Dickerson, S. (2011). *Social Psychophysiology for Social and Personality Psychology*. SAGE Publications Ltd.

Borsboom, D. (2005). *Measuring the Mind: Conceptual Issues in Contemporary Psychometrics*. Cambridge University Press.

Bouquerel, E. (Ed.). (1912). *La Clochette* (Issue 12). La Ligue de la Sainte-Messe.

Brady, D. L., Brown, D. J., & Liang, L. H. (2017). Moving beyond assumptions of deviance: The reconceptualization and measurement of workplace gossip. *The Journal of Applied Psychology*, *102*(1), 1–25.

Burke, M. J., Brief, A. P., & George, J. M. (1993). The role of negative affectivity in understanding relations between self-reports of stressors and strains: a comment on the applied psychology literature. *The Journal of Applied Psychology*, *78*(3), 402–412.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-Concept Clarity: Measurement, Personality Correlates, and Cultural Boundaries. *Journal of Personality and Social Psychology*, *70*(1), 141–156.

Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., & Pinneau., S. R. (1980). *Job demands and worker health*. University of Michigan, Institute of Social Research.

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: the BIS/BAS scales. *Journal of Personality and Social Psychology*, *67*(2), 319–333.

Caza, B. B., & Cortina, L. M. (2007). From Insult to Injury: Explaining the Impact of Incivility. *Basic and Applied Social Psychology*, *29*(4), 335–350.

Chan, K. W., Huang, X., & Ng, P. M. (2008). Managers’ conflict management styles and employee attitudinal outcomes: The mediating role of trust. *Asia Pacific Journal of Management*, *25*(2), 277–295.

Cohen, D., Vandello, J., Puente, S., & Rantilla, A. (1999). “When You Call Me That, Smile!” How Norms for Politeness, Interaction Styles, and Aggression Work Together in Southern Culture.

Social Psychology Quarterly, *62*(3), 257–275.

Colquitt, J. A., Sabey, T. B., Rodell, J. B., & Hill, E. T. (2019). Content validation guidelines: Evaluation criteria for definitional correspondence and definitional distinctiveness. *The Journal of Applied Psychology*, *104*(10), 1243–1265.

Cooper, J. (2007). *Cognitive dissonance: 50 years of a classic theory*. Sage.

Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review*, *32*(5), 605–622.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*(4), 281–302.

Dallinger, J. M., & Hample, D. (1995). Personalizing and managing conflict. *International Journal of Conflict Management*, *6*(3), 273–289.

De Dreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *The Journal of Applied Psychology*, *88*(4), 741–749.

Deutsch, M. (1969). Conflicts: Productive and Destructive. *The Journal of Social Issues*, *25*(1), 7–42.

de Wit, F. R. C., & Greer, L. L. (2008). The black-box deciphered: A meta-analysis of team diversity, conflict, and team performance. *Proceedings: A Conference of the American Medical Informatics Association*, *2008*(1), 1–6.

de Wit, F. R. C., Greer, L. L., & Jehn, K. A. (2012). The paradox of intragroup conflict: A meta-analysis. *The Journal of Applied Psychology*, *97*(2), 360.

Doshy, P. V., & Wang, J. (2014). Workplace incivility: What do targets say about it? *American Journal of Management*, *14*(1-2), 30–42.

Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social Undermining in the Workplace. *Academy of Management Journal*, *45*(2), 331–351.

Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, *44*(2), 350–383.

Einarsen, S. (2000). Harassment and bullying at work: A review of the scandinavian approach.

Aggression and Violent Behavior, *5*(4), 379–401.

Elliot, A. J., & Devine, P. G. (1994). On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of Personality and Social Psychology*, *67*(3), 382.

Elster, J. (2011). How Outlandish Can Imaginary Cases Be? *Journal of Applied Philosophy*, *28*(3), 241–258.

Epictetus. (1955). *The Enchiridion* (G. Long, trans.). Promethean Press. (Original work published 101)

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, *4*(3), 272.

Farrell, D. (1983). Exit, Voice, Loyalty, and Neglect as Responses to Job Dissatisfaction: A Multidimensional Scaling Study. *Academy of Management Journal*, *26*(4), 596–607.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160.

Fehr, R., Yam, K. C., He, W., Chiang, J. T.-J., & Wei, W. (2017). Polluted work: A self-control perspective on air pollution appraisals, organizational citizenship, and counterproductive work behavior. *Organizational Behavior and Human Decision Processes*, *143*, 98–110.

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *The Journal of Applied Psychology*, *93*(6), 1348–1366.

Festinger, L. (1954). A Theory of Social Comparison Processes. *Human Relations; Studies towards the Integration of the Social Sciences*, *7*(2), 117–140.

Festinger, L. (1962). *A theory of cognitive dissonance*. Stanford University Press.

Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal Psychology*, *58*(2), 203–210.

Fields, D. L. (2002). *Taking the Measure of Work: A Guide to Validated Scales for Organizational Research and Diagnosis*. SAGE Publications, Inc.

Fisher, C. D. (2000). Mood and emotions while working: Missing pieces of job satisfaction? *Journal* *of Organizational Behavior*, *21*(2), 185–202.

Fisher, C. D., & To, M. L. (2012). Using experience sampling methodology in organizational behavior. *Journal of Organizational Behavior*, *33*(7), 865–877.

Fisher, R., Ury, W. L., & Patton, B. (2011). *Getting to yes: Negotiating agreement without giving in*. Penguin.

Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, *18*(3), 382–388.

Frankl, V. E. (1959). *Man's Search for Meaning*. Beacon Press.

Frazier, T. W., & Youngstrom, E. A. (2007). Historical increase in the number of factors measured by commercial tests of cognitive ability: Are we overfactoring? *Intelligence*, *35*(2), 169–182.

Garnefski, N., & Kraaij, V. (2006). Cognitive emotion regulation questionnaire--development of a short 18-item version (CERQ-short). *Personality and Individual Differences*, *41*(6), 1045–1053.

Gawronski, B. (2012). Back to the future of dissonance theory: Cognitive consistency as a core motive. *Social Cognition*, *30*(6), 652–668.

Gawronski, B., & Strack, F. (2004). On the propositional nature of cognitive consistency: Dissonance changes explicit, but not implicit attitudes. *Journal of Experimental Social Psychology*, *40*(4), 535–542.

Gelfand, M. J., Nishii, L. H., & Raver, J. L. (2006). On the nature and importance of cultural tightness-looseness. *The Journal of Applied Psychology*, *91*(6), 1225–1244.

Gilovich, T., Medvec, V. H., & Savitsky, K. (2000). The spotlight effect in social judgment: an egocentric bias in estimates of the salience of one's own actions and appearance. *Journal of Personality and Social Psychology*, *78*(2), 211–222.

Greer, L. L., & Jehn, K. A. (2007). The pivotal role of negative affect in understanding the effects of process conflict on group performance. In E. A. Mannix, M. A. Neale, & C. P. Anderson (Ed.), *Affect and Groups* (pp. 21–43). Emerald Group Publishing Limited.

Guan, K. W. (2019). *How do we feel when angels turn out to be demons?: the experience and effects* *of misperceiving moral character* [University of British Columbia]. https://open.library.ubc.ca/collections/ubctheses/24/items/1.0380500

Guetzkow, H., & Gyr, J. (1954). An Analysis of Conflict in Decision-Making Groups. *Human Relations; Studies towards the Integration of the Social Sciences*, *7*(3), 367–382.

Hample, D. (2016). Taking conflict personally. *The International Encyclopedia of Interpersonal Communication*. https://doi.org/10.1002/9781118540190

Hample, D., & Cionea, I. A. (2010). Taking conflict personally and its connections with aggressiveness. In T. Avtgis & A. S. Rancer (Eds.), *Arguments, Aggression, and Conflict: New Directions in Theory and Research* (pp. 372–387). Routledge.

Hample, D., & Dallinger, J. M. (1995). A Lewinian perspective on taking conflict personally: Revision, refinement, and validation of the instrument. *Communication Quarterly*, *43*(3), 297–319.

Hartgerink, C. H. J., van Beest, I., Wicherts, J. M., & Williams, K. D. (2015). The ordinal effects of ostracism: a meta-analysis of 120 Cyberball studies. *PloS One*, *10*(5), e0127002.

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: model, processes and outcomes. *Behaviour Research and Therapy*, *44*(1), 1–25.

Heine, S. J., Proulx, T., & Vohs, K. D. (2006). The meaning maintenance model: On the coherence of social motivations. *Personality and Social Psychology Review*, *10*(2), 88–110.

Hendrickson, A. E., & White, P. O. (1964). Promax: A quick method for rotation to oblique simple structure. *The British Journal of Mathematical and Statistical Psychology*, *17*(1), 65–70.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *The Behavioral and Brain Sciences*, *33*, 61–135.

Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, *44*(2), 227–239.

Hershcovis, M. S. (2011). “Incivility, social undermining, bullying… oh my!”: A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, *32*, 499–519.

Hershcovis, M. S., & Reich, T. C. (2013). Integrating workplace aggression research: Relational, contextual, and method considerations. *Journal of Organizational Behavior*, *34*(S1), S26–S42.

Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, *1*(1), 104–121.

Hinkin, T. R. (2005). Scale development principles and practices. In R. A. Swanson & E. F. Holton (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 161–179). Berret Koehler.

Hirsh, J. B. (2012). Pragmatic Perspectives on the Psychology of Meaning. *Psychological Inquiry*, *23*(4), 354–360.

Hjerto, K. B. (2017). Burning hearts in conflict. *International Journal of Conflict Management*, *28*(1), 50–73.

Hodge, J., Overbeck, J., Jehn, K., & De Wit, F. (2020). *Now it's getting personal: Comparing effects of meaning violation and conflict type on workplace wellbeing*.

Horney, K. (1950). *Neurosis and human growth: The struggle toward self-realization*. W.W. Norton & Company.

Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika*, *30*, 179–185.

Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, *40*(2).

Jehn, K. A. (1997). A qualitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly*, *42*(3), 530–557.

Jehn, K. A. (2000). The influence of proportional and perceptual conflict composition on team performance. *International Journal of Conflict Management*, *11*(1), 56–73.

Jehn, K. A. (2014). Types of conflict: The history and future of conflict definitions and typologies. In

O. B. Ayoko, N. M. Ashkanasy, & K. A. Jehn (Eds.), *Handbook of Conflict Management Research* (pp. 3–18).

Jehn, K. A., Greer, L., Levine, S., & Szulanski, G. (2008). The effects of conflict types, dimensions, and emergent states on group outcomes. *Group Decision and Negotiation*, *17*(6), 465–495.

Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, *44*(2), 238–251.

Jehn, K. A., Rispens, S., & Thatcher, S. M. B. (2010). The effects of conflict asymmetry on work group and individual outcomes. *Academy of Management Journal. Academy of Management*, *53*(3), 596–616.

Johnson, D. W., Johnson, R. T., & Tjosvold, D. (2000). Constructive controversy: The value of intellectual opposition. In M. Deutsch & P. T. Coleman (Eds.), *The handbook of conflict resolution: Theory and practice*. Jossey-Bass.

Kaiser, H. F. (1960). The Application of Electronic Computers to Factor Analysis. *Educational and Psychological Measurement*, *20*(1), 141–151.

Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: a longitudinal investigation. *Journal of Occupational Health Psychology*, *4*(4), 337–346.

Kenny, & David, A. (1994). *Interpersonal Perception: A Social Relations Analysis*. Guilford Press.

Kilduff, G. J., Willer, R., & Anderson, C. (2016). Hierarchy and Its Discontents: Status Disagreement Leads to Withdrawal of Contribution and Lower Group Performance. *Organization Science*, *27*(2), 373–390.

Kline, R. (2013). Exploratory and confirmatory factor analysis. In Y. Petscher, C. Schatschneider, & D. L. Compton (Eds.), *Applied quantitative analysis in the social sciences* (pp. 171–205). Routledge.

Koys, D. J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology*, *54*(1), 101–114.

Lanaj, K., Johnson, R. E., & Barnes, C. M. (2014). Beginning the workday yet already depleted? Consequences of late-night smartphone use and sleep. *Organizational Behavior and Human Decision Processes*, *124*(1), 11–23.

Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal of Management*, *33*(6), 841–866.

Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, *107*(1), 34–47.

Lee, K., & Allen, N. J. (2002). Organizational Citizenship Behavior and Workplace Deviance: The Role of Affect and Cognitions. *Journal of Applied Psychology*, *87*(1), 131–142.

Lefkowitz, J. (2017). *Ethics and Values in Industrial-Organizational Psychology*. Taylor & Francis.

Lehman, W. E., & Simpson, D. D. (1992). Employee substance use and on-the-job behaviors. *The Journal of Applied Psychology*, *77*(3), 309–321.

Leung, A. K.-Y., & Cohen, D. (2011). Within- and between-culture variation: individual differences and the cultural logics of honor, face, and dignity cultures. *Journal of Personality and Social Psychology*, *100*(3), 507–526.

Levy, N. K., Harmon-Jones, C., & Harmon-Jones, E. (2018). Dissonance and discomfort: Does a simple cognitive inconsistency evoke a negative affective state? *Motivation Science*, *4*(2), 95–108.

Lievens, F., De Corte, W., & Schollaert, E. (2008). A closer look at the frame-of-reference effect in personality scale scores and validity. *The Journal of Applied Psychology*, *93*(2), 268–279.

Loch, C. H., Huberman, B. A., & Stout, S. (2000). Status competition and performance in work groups. *Journal of Economic Behavior & Organization*, *43*(1), 35–55.

Luce, R. F., & Raiffa, H. (1957). *Games and Decisions: Introduction and Critical Survey*. Wiley.

Martinie, M.-A., Olive, T., Milland, L., Joule, R.-V., & Capa, R. L. (2013). Evidence that dissonance arousal is initially undifferentiated and only later labeled as negative. *Journal of Experimental Social Psychology*, *49*(4), 767–770.

Maslach, C. (1993). Burnout: A multidimensional perspective. In C. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 19–32). Taylor & Francis.

Matz, D. C., & Wood, W. (2005). Cognitive dissonance in groups: the consequences of disagreement. *Journal of Personality and Social Psychology*, *88*(1), 22–37.

McCrae, R. R., & Sutin, A. R. (1997). Conceptions and correlates of openness to experience. In R. Hogan, J. Johnsons, & S. Briggs (Eds.), *Handbook of Personality and Psychology* (pp. 825–847). Academic Press.

McGraw, A. P., & Warren, C. (2010). Benign violations: making immoral behavior funny. *Psychological Science*, *21*(8), 1141–1149.

McGregor, I., Nash, K., Mann, N., & Phills, C. E. (2010). Anxious uncertainty and reactive approach motivation (RAM). *Journal of Personality and Social Psychology*, *99*(1), 133–147.

McKnight, D. H., Ahmad, S., & Schroeder, R. G. (2001). When do feedback, incentive control, and autonomy improve morale? The importance of employee-management relationship closeness. *Journal of Managerial Issues*, *13*(4), 466–482.

Mendes, W. B., Blascovich, J., Hunter, S. B., Lickel, B., & Jost, J. T. (2007). Threatened by the unexpected: Physiological responses during social interactions with expectancy-violating partners. *Journal of Personality and Social Psychology*, *92*(4), 698–716.

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the Workplace: Theory, Research, and Application*. SAGE.

Mikkelsen, E. G., & Einarsen, S. (2002). Relationships between exposure to bullying at work and psychological and psychosomatic health complaints: the role of state negative affectivity and generalized self-efficacy. *Scandinavian Journal of Psychology*, *43*(5), 397–405.

Miller, C. W., & Roloff, M. E. (2014). When hurt continues: Taking conflict personally leads to rumination, residual hurt and negative motivations toward someone who hurt us. *Communication Quarterly*, *62*(2), 193–213.

Miner, K. N., Diaz, I., Wooderson, R. L., McDonald, J. N., Smittick, A. L., & Lomeli, L. C. (2018). A workplace incivility roadmap: Identifying theoretical speedbumps and alternative routes for future research. *Journal of Occupational Health Psychology*, *23*(3), 320–337.

Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *The Journal of Applied Psychology*, *92*(4), 1159–1168.

Moorhead, G., Ference, R., & Neck, C. P. (1991). Group Decision Fiascoes Continue: Space Shuttle Challenger and a Revised Groupthink Framework. *Human Relations; Studies towards the Integration of the Social Sciences*, *44*(6), 539–550.

Morewedge, C. K. (2009). Negativity bias in attribution of external agency. *Journal of Experimental Psychology. General*, *138*(4), 535–545.

Nemeth, C. J., Connell, J. B., Rogers, J. D., & Brown, K. S. (2001). Improving Decision Making by Means of Dissent. *Journal of Applied Social Psychology*, *31*(1), 48–58.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

O'Neill, T. A., Allen, N. J., & Hastings, S. E. (2013). Examining the "Pros" and "Cons" of Team Conflict: A Team-Level Meta-Analysis of Task, Relationship, and Process Conflict. *Human Performance*, *26*(3), 236–260.

Organ, D. W. (2018). Organizational Citizenship Behavior: Recent Trends and Developments. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*(1), 295–306.

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2005). *Organizational Citizenship Behavior: Its Nature, Antecedents, and Consequences*. SAGE Publications.

Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, *136*(2), 257–301.

Park, C. L., Riley, K. E., George, L. S., Gutierrez, I. A., Hale, A. E., Cho, D., & Braun, T. D. (2016).

Assessing Disruptions in Meaning: Development of the Global Meaning Violation Scale. *Cognitive Therapy and Research*, *40*(6), 831–846.

Park, G., & DeShon, R. P. (2018). Effects of group-discussion integrative complexity on intergroup relations in a social dilemma. *Organizational Behavior and Human Decision Processes*, *146*, 62–75.

Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (Vol. 1, pp. 17–59). Academic Press.

Perry, R., Sibley, C. G., & Duckitt, J. (2013). Dangerous and competitive worldviews: A meta-analysis of their associations with Social Dominance Orientation and Right-Wing Authoritarianism. *Journal of Research in Personality*, *47*(1), 116–127.

Piaget, J. (1929). *The child's conception of the world*. Rowman & Littlefield, c2007.

Podsakoff, N. P., Podsakoff, P. M., Mackenzie, S. B., & Klinger, R. L. (2013). Are we really measuring what we say we're measuring? Using video techniques to supplement traditional construct validation procedures. *The Journal of Applied Psychology*, *98*(1), 99–113.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, *88*(5), 879–903.

Pravettoni, G., Cropley, M., Leotta, S. N., & Bagnara, S. (2007). The differential role of mental rumination among industrial and knowledge workers. *Ergonomics*, *50*(11), 1931–1940.

Proulx, T., & Heine, S. J. (2008). The case of the transmogrifying experimenter: Affirmation of a moral schema following implicit change detection. *Psychological Science*, *19*(12), 1294–1300.

Proulx, T., & Inzlicht, M. (2012a). The five "A" s of meaning maintenance: Finding meaning in the theories of sense-making. *Psychological Inquiry*, *23*(4), 317–335.

Proulx, T., & Inzlicht, M. (2012b). Moderated Disanxiousuncertlibrium: Specifying the Moderating and Neuroaffective Determinants of Violation-Compensation Effects. *Psychological Inquiry*, *23*(4), 386–396.

Proulx, T., Inzlicht, M., & Harmon-Jones, E. (2012). Understanding all inconsistency compensation as a palliative response to violated expectations. *Trends in Cognitive Sciences*, *16*(5), 285–291.

Roseel, Y. (2012). Lavaan: An r package for structural equation modeling. *Journal of Statistical Software*, *48*(2), 1–36.

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, *89*(1), 925–946.

Sanchez-Burks, J., Neuman, E. J., Ybarra, O., Kopelman, S., Park, H., & Goh, K. (2008). Folk wisdom about the effects of relationship conflict. *Negotiation and Conflict Management Research*, *1*(1), 53–76.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of Work Engagement With a Short Questionnaire: A Cross-National Study. *Educational and Psychological Measurement*, *66*(4), 701–716.

Schilpzand, P., Leavitt, K., & Lim, S. (2016). Incivility hates company: Shared incivility attenuates rumination, stress, and psychological withdrawal by reducing self-blame. *Organizational Behavior and Human Decision Processes*, *133*, 33–44.

Schoemann, A. M., Boulton, A. J., & Short, S. D. (2017). Determining Power and Sample Size for Simple and Complex Mediation Models. *Social Psychological and Personality Science*, *8*(4), 379–386.

Schweiger, D. M., Sandberg, W. R., & Rechner, P. L. (1989). Experiential Effects of Dialectical Inquiry, Devil's Advocacy and Consensus Approaches to Strategic Decision Making. *Academy of Management Journal*, *32*(4), 745–772.

Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.

Shafa, S., Harinck, F., Ellemers, N., & Beersma, B. (2014). Who are you calling rude? Honor-related differences in morality and competence evaluations after an insult. *Negotiation and Conflict Management Research*, *7*(1), 38–56.

Shieh, G. (2009). Detecting Interaction Effects in Moderated Multiple Regression With Continuous Variables Power and Sample Size Considerations. *Organizational Research Methods*, *12*(3), 510–528.

Simon, L., Greenberg, J., & Brehm, J. (1995). Trivialization: the forgotten mode of dissonance reduction. *Journal of Personality and Social Psychology*, *68*(2), 247–260.

Society for Industrial Organizational Psychology (SIOP). (2019). *SIOP Mission, Values, Strategic Goals*. https://www.siop.org/About-SIOP/Mission

Steger, M. F., Dik, B. J., & Shim, Y. (2019). Measuring satisfaction and meaning at work. In M. W. Gallagher & S. J. Lopez (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 373–388). American Psychological Association.

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*(1), 54–65.

Susskind, A. M., Kacmar, K. M., & Borchgrevink, C. P. (2003). Customer service providers’ attitudes relating to customer service and customer satisfaction in the customer-server exchange. *The Journal of Applied Psychology*, *88*(1), 179–187.

Tacket, J. L., & Lahey, B. B. (2017). Neuroticism. In T. A. Widiger (Ed.), *The Oxford handbook of the Five Factor Model* (pp. 39–56). Oxford University Press.

Tepper, B. J. (2000). Consequences of Abusive Supervision. *Academy of Management Journal*, *43*(2), 178–190.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta‐analytic findings. *Personnel Psychology*, *46*(2), 259–293.

Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. American Psychological Association.

Thompson, L. L. (1991). Information exchange in negotiation. *Journal of Experimental Social*

Psychology, *27*(2), 161–179.

Thomson, J. J. (1985). The Trolley Problem. *The Yale Law Journal*, *94*(6), 1395–1415.

Thrasher, G. R., Krenn, D. K., & Marchiondo, L. A. (2020). Are Counter-Productive Workplace Behaviors and Workplace Deviance Parallel Constructs? A Meta-Analytic Test of a Common Practice. *Occupational Health Science*, *4*(3), 239–270.

Tjosvold, D., & Sun, H. F. (2002). Understanding conflict avoidance: Relationship, motivations, actions, and consequences. *International Journal of Conflict and Violence*, *13*(2), 142–164.

Townsend, S. S. M., Eliezer, D., & Major, B. (2013). The embodiment of meaning violations. In K. D. Markman, T. Proulx, & M. J. Lindberg (Eds.), *The psychology of meaning.* (pp. 381–400). American Psychological Association.

Tullett, A. M., Teper, R., & Inzlicht, M. (2011). Confronting Threats to Meaning: A New Framework for Understanding Responses to Unsettling Events. *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, *6*(5), 447–453.

Vahle-Hinz, T., Bamberg, E., Dettmers, J., Friedrich, N., & Keller, M. (2014). Effects of work stress on work-related rumination, restful sleep, and nocturnal heart rate variability experienced on workdays and weekends. *Journal of Occupational Health Psychology*, *19*(2), 217–230.

Vandenberghe, C., Panaccio, A., & Ayed, A. K. B. (2011). Continuance commitment and turnover: Examining the moderating role of negative affectivity and risk aversion. *Journal of Occupational and Organizational Psychology*, *84*(2), 403–424.

Vangelisti, A. L. (2009). Challenges in conceptualizing social support. *Journal of Social and Personal Relationships*, *26*(1), 39–51.

Wallenfelsz, K. P., & Hample, D. (2010). The role of taking conflict personally in imagined interactions about conflict. *Southern Communication Journal*, *75*(5), 471–487.

Walz, S. M., & Niehoff, B. P. (2000). Organizational Citizenship Behaviors: Their Relationship to Organizational Effectiveness. *Journal of Hospitality & Tourism Research*, *24*(3), 301–319.

Warren, C., Barsky, A., & McGraw, A. P. (2021). What Makes Things Funny? An Integrative Review of the Antecedents of Laughter and Amusement. *Personality and Social Psychology Review: An Official Journal of the Society for Personality and Social Psychology, Inc*, *25*(1), 41–65.

Watkins, M. W. (2006). Determining parallel analysis criteria. *Journal of Modern Applied Statistical Methods*, *5*(2), 344–346.

Watson, D., & Clark, L. A. (1999). *The PANAS-X: Manual for the positive and negative affect schedule-expanded form*.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063–1070.

Weingart, L. R., Behfar, K. J., Bendersky, C., Todorova, G., & Jehn, K. A. (2015). The Directness and Oppositional Intensity of Conflict Expression. *Academy of Management Review*, *40*(2), 235–262.

Weisman, P. M. (2018). *Development and psychometric properties of the Police Exposure and Impact Scale* [University of Colorado Colorado Springs.]. https://mountainscholar.org/handle/10976/167054

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (pp. 1–74). Elsevier Science/JAI Press.

Weiss, H. M., Nicholas, J. P., & Daus, C. S. (1999). An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time. *Organizational Behavior and Human Decision Processes*, *78*(1), 1–24.

Westfall, J., Judd, C. M., & Kenny, D. A. (2015). Replicating studies in which samples of participants respond to samples of stimuli. *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, *10*(3), 390–399.

Wharton, A. S. (1993). The Affective Consequences of Service Work: Managing Emotions on the Job. *Work and Occupations*, *20*(2), 205–232.

Williams, K. D., Cheung, C. K., & Choi, W. (2000). Cyberostracism: effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, *79*(5), 748–762.

Williams, K. D., & Jarvis, B. (2006). Cyberball: a program for use in research on interpersonal ostracism and acceptance. *Behavior Research Methods*, *38*(1), 174–180.

Williams, L. J., & Anderson, S. E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, *17*(3), 601–617.

Williams, L. J., & Anderson, S. E. (1994). An alternative approach to method effects by using latent-variable models: Applications in organizational behavior research. *The Journal of Applied Psychology*, *79*(3), 323–331.

Yao, J., Ramirez-Marin, J., Brett, J., Aslani, S., & Semnani-Azad, Z. (2017). A Measurement Model for Dignity, Face, and Honor Cultural Norms. *Management and Organization Review*, *13*(4), 713–738.

Zhu, L. (2008). *Third party reactions to justice failure: An empirical test* [PhD]. University of British Columbia.

Zhu, L., Martens, J. P., & Aquino, K. (2012). Third party responses to justice failure: An identity-based meaning maintenance model. *Organizational Psychology Review*, *2*(2), 129–151.

Zickar, M. J. (2010). Recognizing the need for a humanistic movement within industrial--organizational psychology. *Industrial and Organizational Psychology*, *3*(1), 97–99.

Zwick, W. R., & Velicer, W. F. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, *99*(3), 432–442.

University Library

MINERVA ACCESS

A gateway to Melbourne's research publications

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Hodge, Josh

Title:
The Trouble with "Shoulds": Interpersonal Meaning Violation and Workplace Wellbeing

Date:
2021

Persistent Link:
http://hdl.handle.net/11343/274915

File Description:
Final thesis file

Terms and Conditions:
Terms and Conditions: Copyright in works deposited in Minerva Access is retained by the copyright owner. The work may not be altered without permission from the copyright owner. Readers may only download, print and save electronic copies of whole works for their own personal non-commercial use. Any use that exceeds these limits requires permission from the copyright owner. Attribution is essential when quoting or paraphrasing from these works.