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Too Many Constructs in the Kitchen: Toward a Feature-Based Approach to Mistreatment

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Abstract

The field of workplace mistreatment has grown considerably over the last two decades yet continues to be plagued by construct overload and measurement challenges. Constructs such as incivility, bullying, abusive supervision, and social undermining are definitionally distinct in terms of their frequency, intensity, and intentionality but this is seldom explicitly measured. Across three studies, we created and developed the Features of Mistreatment (FOM) measure to explicitly measure frequency, intensity, and perceived intentionality. In Study 1 (N = 282), we examined the psychometric properties of the initial 28-item FOM measure and revised the subscales to four items each. We found that a three-factor ESEM yielded good model fit and factor loadings. In Study 2, using both two-wave (N = 89) and cross-sectional analyses (N = 257), we assessed a SEM mediation model of workplace mistreatment in which we used frequency, intensity, and intentionality of mistreatment to predict work-related outcomes via negative affective reactions. We found that the relationships between workplace mistreatment and affective commitment and turnover intentions (but not retaliation) were mediated by negative affective reactions. Finally, in Study 3, we conducted a Latent Profile Analysis (LPA) and found support for four distinct profiles of workplace mistreatment. The largest profile included the Low Mistreatment group (43.10%). The other profiles included Intense Mistreatment (8.70%), Moderate Mistreatment (19.10%), and High Perceived Intent (29.10%). Members in the Low Mistreatment profile had the best work outcomes overall, reporting the highest scores on affective commitment and lowest scores on turnover intentions and retaliation. Thus, directly measuring the features of workplace mistreatment allowed us to empirically distinguish how mistreatment strength, frequency, and perceived intentionality combine across different profiles of mistreatment and assess each profile's distinct relationships with important work outcomes.

Keywords

workplace mistreatment, incivility, bullying, abusive supervision.

Summary for Lay Audience

Most adults spend a substantial amount of time at work, and often a considerable amount of this time is spent interacting with colleagues. When we are mistreated by our colleagues, it can have a significant impact on our work and nonwork lives. The type of mistreatment one experiences can vary depending on how frequent, intense, and intentional it is, and it has been theorized that different mistreatment experiences relate differently to important work outcomes. Specifically, workplace mistreatment that is more frequent, intense, and intentional is likely to be more harmful than workplace mistreatment that is less frequent, intense, and intentional. However, widely-used workplace mistreatment measures do not explicitly measure frequency, intensity, and intentionality, and contain very similar items across measures. Because of this, widely-used measures of incivility, bullying, abusive supervision, etc. yield similar relationships to work outcomes even though this goes against logic and theory.

This research involved the development of a new measure of workplace mistreatment using a feature-based approach. We developed measures for three key features of mistreatment: frequency, intensity, and perceived intentionality. This approach allowed us to make a novel contribution to the workplace mistreatment literature by examining how these key features relate to important work outcomes, and how they combine to create different experiences of workplace mistreatment. As expected, we found that as reports of frequency, intensity, and intentionally decreased, reports of affective commitment increased, and turnover intentions decreased.

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Chapter 1

1. Introduction

The workplace mistreatment literature has gained considerable traction in Industrial-Organizational Psychology over the last two decades (Miner et al., 2018; Schilpzand et al., 2016); however, significant construct overlap exists among a multitude of workplace mistreatment constructs (Barling et al., 2008; Hershcovis, 2011; Tepper & Henle, 2011; Walsh & Magley, 2014; Wesselmann & Dvir, 2021). For example, considerable definitional overlap exists among incivility (Andersson & Pearson, 1999), social undermining (Duffy et al., 2002), bullying (Einarsen et al., 2009), abusive supervision (Tepper, 2000), interpersonal conflict (Spector & Jex, 1998), emotional abuse (Keashly & Harvey, 2005), and workplace violence (Rogers & Kelloway, 1997). Further, although there are a few definitional differences among these constructs regarding frequency, intensity, and perceived intentionality, these differentiating components are rarely, if ever, measured. This leads to a disorganized literature where it is difficult to interpret specific outcomes and correlates for each individual workplace mistreatment variable, with meta-analytic findings indicating that low-level forms of aggression such as incivility relate similarly to outcomes as more intense forms of aggression such as bullying (Hershcovis, 2011).

As such, it is time to bring organization to this literature. This research answers a call from workplace mistreatment researchers (e.g., Hershcovis, 2011; Nixon et al., 2021) who argue that we should focus on the definitional components of workplace mistreatment constructs to re-evaluate our measurement of these constructs. In this thesis, we conduct three studies that examine a new way to measure mistreatment using a feature-based approach. The first study involves the development of a measure to assess three key features of workplace mistreatment:

frequency, intensity, and perceived intentionality. The second study involves testing a new model of workplace mistreatment as measured by these three features. Finally, in Study 3, we utilize person-center analyses to look at various profiles of workplace mistreatment using the features of mistreatment as profile indicators.

In this section, we begin by outlining the prevalence of workplace mistreatment and describing the various outcomes and antecedents of experienced mistreatment. We describe important boundary conditions in the mistreatment process as well as the mediating role of affective reactions. We then provide an overview of the various workplace mistreatment construct definitions and measurement concerns within the mistreatment literature. Finally, we end the chapter with roadmap of the three empirical studies that comprise this research.

1.1 Prevalence of Workplace Mistreatment

By all accounts, workplace mistreatment is a pervasive concern for organizations, and is estimated to cost between $691.70 billion to $1.97 trillion annually (Dhanani et al., 2021). However, the rate of prevalence varies depending on which workplace mistreatment construct is being assessed. Using meta-analytic methods, Dhanani and colleagues found that 34% of working individuals experienced workplace mistreatment and 44% of working individuals witnessed workplace mistreatment. Lower-level forms of aggression such as incivility were more often experienced than were higher-level forms of aggression such as bullying and physical violence (i.e., .75 versus .17 and .19, respectively). These findings align with previous research that suggests incivility is widespread throughout organizations (Porath & Person, 2013), occurs across a variety of occupations and industries, and is a global phenomenon (Schilpzand et al., 2016). Interestingly, Dhanani et al. (2021) found that workplace mistreatment was comparatively less prevalent in countries with greater workers' rights, suggesting that protective employment

laws shield employees from experiencing and witnessing mistreatment. Specifically, workers' rights were negatively related to reports of physical violence, general harassment, and bullying.

1.2 Outcomes of Experiencing Workplace Mistreatment

Experiencing workplace mistreatment has been found to be associated with an array of negative outcomes for the target themselves. Experiencing workplace mistreatment is positively associated with victim turnover intentions (Bowling & Beehr, 2006; Chiaburu & Harrison, 2008; Chris et al., 2022; Djurkovik et al., 2008), withdrawal behaviours (Chen et al., 2013; Hoel & Cooper, 2000; Sliter et al., 2012), burnout (Nielsen & Einarsen, 2012), counterproductive workplace behaviours (Bowling & Beehr, 2006; Mackey et al., 2017), depression (Lim & Lee, 2011; Mackey et al., 2017; Nielsen & Einarsen, 2012), anxiety (Nielsen & Einarsen, 2012), emotional exhaustion (Chris et al., 2022; Mackey et al., 2017; Sliter et al., 2010), isolation (Hershcovis et al., 2017), stress (Chris et al., 2022), psychological distress (Abubakar, 2018), somatic symptoms (Chris et al., 2022; Nielsen & Einarsen, 2012), and insomnia (Demsky et al., 2019; Nielsen & Einarsen, 2012). Targets of workplace mistreatment report lower levels of job satisfaction (Bowling & Beehr, 2006; Chris et al., 2022; Mackey et al., 2017), organizational commitment (Bowling & Beehr, 2006; Chris et al., 2022; Duffy et al., 2002; Mackey et al., 2017), perceived organizational justice (Bowling & Beehr, 2006), perceived organizational support (Mackey et al., 2017), organizational citizenship behaviours (Mackey et al., 2017), performance, and physical and emotional well-being (Bowling & Beehr, 2006; Hoel et al., 2004; Nielsen & Einarsen, 2012). Victims of workplace mistreatment are more likely to later become perpetrators of workplace mistreatment (Chris et al., 2022; Lee et al., 2016), with mistreatment often escalating to become more serious over time (Andersson & Pearson, 1999).

1.3 Antecedents of Experienced Workplace Mistreatment

An emerging stream of research highlights dispositional antecedents of experiencing workplace mistreatment. Being the target of workplace mistreatment is associated with higher target levels of negative affect (Bowling & Beehr, 2006; Glasø et al., 2007; Han et al., 2022; Yao et al., 2021), narcissism (Zhang & Bednall, 2016), neuroticism (Glasø et al., 2007; Han et al., 2022; Milam et al., 2009; Nielsen et al., 2017; Persson et al., 2009; Yao et al., 2021) and lower levels of agreeableness (Han et al., 2022; Milam et al., 2009; Nielsen et al., 2017), conscientiousness (Han et al., 2022; Nielsen et al., 2017; Yao et al., 2021), and self-esteem (Yao et al., 2021).

Situational antecedents associated with experienced mistreatment include perceived uncivil climate (Han et al., 2022; Yao et al., 2021), passive leadership, lack of civility norms (Han et al., 2022), and role stressors (Taylor & Kluemper, 2012). Experienced mistreatment has also been found to be negatively related to perceived supportive climate (Yao et al., 2021) and norms for civility (Walsh et al., 2012).

1.4 Moderators of Experienced Workplace Mistreatment

In addition to research outlining key antecedents and outcomes of experienced workplace mistreatment, emerging research highlights important boundary conditions that buffer or strengthen the effect of workplace mistreatment. For example, research has identified a variety of perpetrator and target characteristics that moderate the relationship between experienced mistreatment and its correlates. Specifically, perpetrator power appears to strengthen the relationship between experienced incivility and target outcomes, including affective commitment, job satisfaction, and turnover intentions (Chris et al., 2022). In terms of target

characteristics, higher levels of neuroticism and lower levels of agreeableness and conscientiousness have been found to heighten the indirect effect of role stress on targets' future enacted aggression following their experience of mistreatment (Taylor & Kluemper, 2012). Although some researchers have focused on target characteristics as antecedents of experienced mistreatment, others argue that personality traits also moderate the relationship between experienced mistreatment and its consequences. For example, Taylor and Kluemper reasoned that highly neurotic and low conscientious and agreeable individuals may be particularly sensitive to the mistreatment they experience, resulting in a greater likelihood of future enacted aggression toward others or their organizations. Alternatively, Welbourne et al. (2020) found evidence that agreeableness moderated the effect of experienced incivility on target strain and instigated incivility, suggesting that highly agreeable individuals experience more stress following their mistreatment due to their desire for social harmony. The authors speculated that the inconsistency in findings with Taylor and Kluemper was due to agreeable individuals being less likely to engage in acts of overt aggression following their mistreatment, and instead engaging in more subtle reciprocation like incivility. In addition, Chen et al. (2013) found that individuals high in narcissism were more likely to disengage from their work in order to protect their sense of self following their experience of mistreatment at work.

Social support may also play an important role in ones' experience of workplace mistreatment. Research has found that emotional (Miner et al., 2012), supervisory (Sakurai & Jex, 2012) and organizational (Miner et al., 2012) supports can buffer against the impact of experienced mistreatment on outcomes for targets. Further, the extent to which an individual perceives themselves to be singled-out in their mistreatment may heighten the effect of experienced mistreatment on target outcomes compared to individuals who are one of many

mistreated employees in their organization (Duffy et al., 2006). Moreover, the extent to which mistreatment is visible to others (i.e., the perceived invisibility of mistreatment) may also moderate the relationship between mistreatment and its correlates (Hershcovis, 2011). Initial findings suggest that covert incivility (i.e., invisible acts of incivility) is more strongly related to outcomes than is overt incivility (i.e., visible acts of incivility; Tarraf, 2012). Although more research is needed before one can draw firm conclusions, Hershcovis (2011) argued that when one experiences mistreatment that is not visible to others, the target may struggle with being believed because of a lack of evidence against the perpetrator.

The context in which mistreatment takes place appears to be extremely important in determining how impactful the mistreatment is likely to be for victims (Chris et al., 2022). For example, workplace mistreatment has been found to occur at high rates in service-oriented industries such as hospitality, social services, health care, and education (e.g., Evans, 2017; Hutchinson & Jackson, 2015; Zhou et al., 2021) compared to non-service-oriented industries, and the relationships between experienced incivility with job satisfaction and enacted incivility are stronger for service-oriented employees compared to individuals outside of these industries (Chris et al., 2022). In addition to industry-type, elements of the target's job appear to play a role in reducing future instigated incivility (Park & Martinez, 2022). Greater job control and work-group civility have been found to buffer the effect of experienced workplace mistreatment on instigated workplace mistreatment (Park & Martinez, 2022). Lastly, civility climate appears to have a buffering effect on the relationships between experienced mistreatment and its many consequences (Yang et al., 2014), including instigated mistreatment, future experienced mistreatment, affective commitment, job satisfaction, emotional and physical stress, and turnover intentions (Yang et al., 2014).

1.5 Mediating Role of Affective Reactions

Affective events theory (AET) has been utilized to understand the link between experienced workplace mistreatment and its consequences (e.g., Cheng et al., 2020; Glasø et al., 2011; Walker et al., 2014). This theoretical framework focuses on how the target of mistreatment makes sense of negative work acts rather than focusing on why individuals engage in mistreatment in the first place. AET posits that work events serve as a proximal cause of moods and emotions, which can then relate to work attitudes and behaviours (Weiss & Cropanzano, 1996). Positive affect is characterized by good feelings such as happiness, energy, and joy, whereas negative affect is characterized by bad feelings such as anger, sadness, and disgust. Positive affect and negative affect are separate entities and are not considered to be opposite ends of the same spectrum (Weiss & Cropanzano, 1996). Thus, low positive affect does not indicate high negative affect, and vice versa.

Although positive events can produce affective reactions, negative work events tend to yield comparatively stronger affective reactions (Taylor, 1991). For this reason, AET can be used to frame mistreatment research because mistreatment is a particularly salient negative work event (Glasø et al., 2011). Specifically, AET suggests that experiencing workplace mistreatment triggers an emotional appraisal process for the target likely leading to negative affective reactions following mistreatment. These negative affective reactions can lead to consequences for work outcomes such as job satisfaction, organizational commitment, turnover intentions, subsequent instigated mistreatment, absenteeism, and turnover (Weiss & Cropanzano, 1996). Accordingly, research which has examined mediating effects of experienced workplace mistreatment and its correlates suggest that negative affect mediates the relationship between experienced incivility and task and creative performance (Porath & Erez, 2009), instigated

incivility, job satisfaction, and turnover intentions (Chris et al., 2022). In the following section, we define relevant workplace mistreatment concepts and discuss their overlap in measurement.

1.6 Definitions & Measurement of Workplace Mistreatment Constructs

In order to understand the nature of the measurement of mistreatment constructs, we conducted a search within the American Psychological Association PsycInfo database of common workplace mistreatment constructs. From this search, we found that the most researched mistreatment constructs are aggression, violence, interpersonal conflict, bullying, and harassment. However, these constructs are widely used outside of organizational research in fields such as criminal justice, sociology, educational psychology, and social psychology. After narrowing our search to top journals within Industrial-Organizational Psychology and Organizational Behaviour specifically, we found that aggression, interpersonal conflict, bullying, harassment, incivility, abusive supervision, and social undermining were common constructs used within organizational research.

Incivility refers to low-level aggressive behaviours that violate workplace norms of respect with unclear intent to harm the target (Andersson & Person, 1999). Although these behaviours typically go unnoticed or undisciplined by the organization (Cortina et al., 2017), they may lead to major consequences for the victim and the observers (Schilpzand et al., 2016). Workplace incivility is typically measured with Cortina and colleagues' (2001) Workplace Incivility Scale (WIS). The WIS is a one-factor, 12-item measure that assesses the frequency of incivility on a five-point Likert scale from 1 (*never*) to 5 (*many times*). Sample items begin with the stem, "During the past year, were you ever in a situation in which any of your supervisors or co- workers…" and then includes item responses such as, "Accused you of incompetence" and "Made jokes at your expense".

Bullying is defined as negative acts (i.e., harassment, offensive comments, exclusion) that lead to negative work experiences and/or outcomes for an individual (Samnani & Singh, 2012). Bullying is unique from other similar constructs because it is an escalated process in which the victim experiences repeated, systematic negative behaviour from the perpetrator. In order to define behaviour as bullying, one must first consider the frequency of the behaviour (does it occur at least 1-2 times in a given week), the persistence of the behaviour (has the behaviour occurred for more than 6 months), how hostile the behaviour is (how harmful the behaviour is), and the real or imagined power imbalance between the target and the perpetrator (Einarsen et al., 2011). Bullying is most commonly measured with the Negative Acts Questionnaire - Revised (NAQ-R; Einarsen et al., 2009). The NAQ-R contains three subscales including Work-Related Bullying (e.g., "Someone withholding information which affects your performance"), Person-Related Bullying (e.g., "Being the subject of excessive teasing or sarcasm"), and Physically Intimidating Bullying (e.g., "Threats of violence or physical abuse"). The NAQ-R is a 22-item scale where items are measured on a five-point Likert scale from 1 (*never*) to 5 (*daily*).

Abusive supervision is defined as "subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors" (Tepper, 2000, p.178). Abusive supervision is distinct from other workplace mistreatment constructs as the behaviour must be perpetrated by a supervisor or someone of higher hierarchical standing within the organization than the perpetrator. This behaviour is defined as persistent and frequently occurring. Abusive supervision is typically measured using Tepper (2000)'s 15-item measure. Sample items include "My boss ridicules me", and "My boss blames me to save themself from embarrassment". These items are measured on a five-point Likert scale from 1 (*never*) to 5 (*very often*).

Social undermining originated in the social psychology/social processes literature and is defined as enduring negative behaviour at work that hinders working relationships and target work outcomes (Duffy et al., 2002). This behaviour leads to negative outcomes for the target (Duffy et al., 2002), particularly when the target is "singled out" as the only person experiencing undermining behaviour at their workplace (Duffy et al., 2006). Social undermining is typically measured using Duffy and colleagues' (2002) 26-item measure. This measure includes two subscales: supervisor undermining (e.g., "undermined your effort to be successful on the job") and co-worker undermining (e.g., "gave you the silent treatment"). These items are measured using a six-point Likert scale from 1 (*never*) to 6 (*every day*).

In organizational research, workplace aggression and violence are typically studied in unison. Workplace aggression is defined as "behavior by an individual or individuals within or outside an organization that is intended to physically or psychologically harm a worker or workers and occurs in a work-related context" (Schat & Kelloway, 2005, p. 191). Workplace aggression is considered an act of violence when it involves physical harm. In accordance with this definition, workplace aggression and violence are characterized by high intensity and intent, but no mention is made regarding frequency. Workplace aggression is often measured using three items from Barling et al. (2001), with a sample item including, "Have you been yelled at or shouted at while you've been at work?". Workplace violence is typically measured using 13 items from Rogers and Kelloway (1997). Both measures use a four-point Likert scale from 0 (*never*) to 3 (*4 or more times*).

Interpersonal conflict and workplace harassment are discussed in broader terms. Interpersonal conflict is defined as negative interpersonal behaviour and/or disagreements involving two or more colleagues at work. Workplace harassment involves "any negative

workplace interpersonal interaction that affects the terms, conditions, or employment decisions related to an individual's job, or creates an intimidating, hostile, or offensive working environment, but is not based on any legally protected characteristic" (Rospenda & Richman, 2004, p. 221-222). As these terms are more general, they are not described by a particular level of frequency, intensity, or intent, and are often used interchangeably with other labels of workplace mistreatment. Interpersonal conflict is typically measured using the Interpersonal Conflict at Work Scale (ICAW; Spector & Jex, 1998). This measure contains four items, with a sample item including, "How often do other people yell at you at work?". Responses are measured on a Likert scale from 1 (*rarely*) to 5 (*very often*). Workplace harassment is typically measured using the Generalized Workplace Harassment Questionnaire, a 29-item instrument with five domains including verbal aggression, disrespect, isolation/exclusion, threats/bribes, and physical aggression (Rospenda & Richman, 2004). This measure is reported on a three-point frequency scale of 1 (*never*) to 3 (*more than once*). See Table 1 for a summary of the most common workplace mistreatment constructs in organizational research.

Table 1. Summary of workplace mistreatment constructs.

Construct	Definition	Distinguishing Features				Sample Item
		Frequent	Intense	Intentional	Other	
Abusive Supervision	Sustained negative behaviour from a supervisor	Yes			Formal Power (Source) Enduring	"Ridicules me"
Aggression & Violence	Behavior intended to physically or psychologically harm worker		Yes	Yes		"Have you been yelled at or shouted at while you've been at work?"
Bullying	Repeated negative acts from a colleague/supervisor over time	Yes	Yes	Yes	Perceived Power (Source)	"Repeated reminders of your blunders"
Harassment	Negative workplace interaction(s) that affect working environment					"Humiliated or belittled you in front of others?"
Incivility	Low-level aggressive behaviour with ambiguous intent to harm the target	No	No	Ambiguous		"Put you down in a condescending way"
Interpersonal Conflict	Organizational stressor involving disagreements between colleagues					"How often are people rude to you at work?"
Social Undermining	Enduring behaviour intended to hurt workplace relationships	Yes		Yes	Enduring	"Put you down when you questioned work procedures"

Note. This table is an extension of Hershcovis (2011; Table 1).

1.7 Measurement Concerns within the Workplace Mistreatment Literature

As evidenced from the above overview of widely-used workplace mistreatment measures, there is significant overlap among the measurement of theoretically different constructs. Each measure instructs respondents to answer items by determining the rate at which they have experienced a set of behaviours. This raises a number of issues. First, asking respondents to accurately recall the number of times they have experienced certain behaviours at work during a specific amount of time places a great deal of strain on memory (Jex & Bayne, 2017). Participants may not be able to recall the correct number of times they have experienced mistreatment, perhaps only focusing on the most salient or recent events.

Second, the frequency labels are not consistent between measures (Jex & Bayne, 2017). This results in respondents having to decipher what is meant by terms such as “Rarely” (ICAWS), “Many Times” (WIS), “Now and Then” (NAQ-R), etc. (Jex & Blayne, 2017). The lack of consistency regarding specific anchors makes the rate of frequency among various mistreatment measures hard to compare, as the highest scale point indicates a daily occurrence for some measures (i.e., Social Undermining) versus four or more times a year for others (i.e., Workplace Aggression and Violence).

Thirdly, and perhaps most critically, frequency of mistreatment is an important differentiating feature among various workplace mistreatment constructs (Hershcovis, 2011; Vranjes & Lyubykh, 2021). There is an underlying assumption when using frequency anchors in measurement that a higher rate of endorsed behaviours indicates a higher level of the construct being measured. However, not all workplace mistreatment constructs are necessarily meant to be frequent (Hershcovis, 2011). For example, Andersson and Pearson (1999) theorized that an accumulation of incivility may spark a “tipping point” for the target in which the intent to harm

is no longer ambiguous and is viewed as coercive action. Accordingly, frequent experiences of uncivil behaviours become a more aggressive form of mistreatment and can no longer be considered incivility. The similarities in measurement between incivility and more extreme forms of aggression such as bullying have meaningful empirical consequences, as meta-analytic research indicates that incivility and bullying similarly predict psychological well-being (-.42 to -.24 and -.43 to -.36), job satisfaction (-.44 to -.35 and -.45 to -.32), and turnover intent (.33 to .40 and .24 to .33; Hershcovis, 2011). This is further evidenced by Walsh and Magley's (2014) findings that found respondents were not making distinctions between mistreatment constructs at an item-level even if they were conceptually distinct. Thus, it is nearly impossible to empirically differentiate between various mistreatment constructs using the established mistreatment measures.

Moreover, using a behaviour-oriented approach to measuring mistreatment (i.e., instructing the respondent about their experience with specific mistreatment behaviours) allows the respondent to only answer the specific behaviours they are asked about. This is a major concern if a respondent is experiencing a form of mistreatment that is not captured by the specific behaviours outlined in the measure. For this reason, behaviour-oriented approaches to mistreatment may lack generalizability, and may result in under-reported levels of mistreatment.

In addition to concerns regarding frequency anchors in measurement, very few studies explicitly measure the intensity or intentionality of the experienced mistreatment. This is a major concern as the only way one can distinguish many of the workplace mistreatment constructs from one another is through their level of intensity and perceived intentionality (Hershcovis, 2011). For this reason, we argue for taking a feature-based approach to measuring mistreatment, where rather than providing a respondent with a series of specific mistreatment behaviours,

respondents are asked general questions regarding the features of their mistreatment experiences. We borrow this approach from the psychological contract literature (i.e., McInnis et al., 2009; Rousseau & Tijoriwala, 1998) and the corporate social responsibility literature (i.e., Bremner, 2016) which have overcome similar challenges in their respective areas by examining key features of constructs in an attempt to create generalizable and effective measures. Accordingly, taking a feature-based approach allows for the fundamental properties of a mistreatment experience to be measured regardless of specific behaviours experienced by targets. Thus, we can meaningfully distinguish between various mistreatment experiences in terms of their mistreatment strength and avoid having to categorize specific mistreatment behaviours under different "types" of mistreatment such as bullying and incivility.

As Podsakoff and colleagues (2016) state, the first step in conducting good-quality research is to establish a clear and well-defined concept. Accordingly, we define features of mistreatment as characteristics of an individual's mistreatment that reflect the overall strength of their mistreatment experience. A review of the literature on workplace mistreatment revealed three features frequently used in definitions to distinguish among mistreatment experiences: frequency, intensity, and perceived intentionality. This review is not exhaustive, and several additional features including perpetrator power (both formal and informal) and the enduring nature of mistreatment (similar to frequency, but specifically reflects how sustained the behaviour is over a period of time) might warrant further attention. However, we focused on the aforementioned features of mistreatment as they are most commonly cited across workplace mistreatment reviews (Vranjes & Lyubykh, 2021). Accordingly, our aim was to create and validate measures of frequency, intensity, and perceived intentionality using a feature-based approach.

1.8 Features of Workplace Mistreatment

As outlined above, frequency, intensity, and perceived intentionality are defining characteristics of an individuals' workplace mistreatment experience. However, these features are either not measured at all or in isolation using the traditional behaviour-based approach to measurement. For example, all widely-used workplace mistreatment measures use frequency anchors in their measurement (Hershcovis, 2011). This is problematic because not all workplace mistreatment constructs are defined as frequent. Conceptually, if respondents experience low-level forms of mistreatment such as incivility very often or every day, that behaviour no longer represents incivility (Andersson & Pearson, 1999). Moreover, even though incivility is definitionally a less extreme form of mistreatment, those that experience more severe mistreatment such as bullying are described as experiencing the highest amount of incivility because of how incivility is measured (Hershcovis, 2011).

The measurement of workplace mistreatment is further complicated by content overlap across the dominant measures. Specifically, the WIS item measuring incivility, "Ignored you or failed to speak to you" is very similar to the NAQ-R item measuring bullying, "Being ignored or excluded", and the Abusive Supervision item, "Gives me the silent treatment", even though they are all conceptually different constructs. This overlap in measurement among conceptually different constructs leads to most mistreatment constructs yielding remarkably similar correlates to each other (Hershcovis, 2011; Nixon et al., 2021). For example, meta-analytic research suggests that incivility yields similar relationships with job satisfaction (r = -.40), turnover intentions (r = .36), and psychological well-being (r = -.33) as does bullying (rs = -.39, .35, -.40, respectively; Hershcovis, 2011).

In addition, frequency, intensity and perceptions of intentionality are conceptually important features that distinguish between mistreatment constructs. For example, incivility is described as low in intensity (Andersson & Pearson, 1999) whereas abusive supervision is described as high in intensity (Tepper, 2000). Further, incivility is described as behaviours enacted with ambiguous intent to harm (Andersson & Pearson, 1999), whereas social undermining is defined as having clear intent to harm (Duffy et al., 2002). However, these two important distinguishing characteristics of workplace mistreatment are not measured by the dominant workplace mistreatment scales. This means that it is impossible to know if what is being measured by one scale (e.g., incivility) is different than what is being measured by another (e.g., bullying) because what separates these forms of mistreatment is not captured in the measurement.

Recently, Nixon and colleagues (2021) examined how two features of mistreatment, intensity and intentionality of behaviour, help to distinguish acts of workplace mistreatment empirically. Specifically, they utilized a person-centered approach to examine how intensity and intentionality of behaviour combine to create different experiences of workplace mistreatment. Nixon et al. (2021) paved the way for workplace mistreatment research using a feature-based approach, and consequently found four distinct experiences of workplace mistreatment: Incivility (low intensity, low perceived intent), Bullying (high intensity, high perceived intent), and two additional classes with moderate levels of intensity and intent. They focused on the unique profile outcomes for the bullying and incivility profile and found that members of the bullying profile reported higher turnover intentions and psychological strain, and lower affective commitment than members in the incivility profile (Nixon et al., 2021).

The recent findings by Nixon and colleagues (2021) help support what has long been stated in the workplace mistreatment literature: key features among workplace mistreatment constructs

are missing in dominant measures, and this is impacting our ability to draw conclusions about correlates of different mistreatment experiences. For this reason, Nixon and colleagues' research is novel and makes an important contribution to field. However, we believe that their measures of frequency, intensity, and intentionality are limited.

First, the authors did not use a feature-based approach to measuring frequency, and instead used a behaviour-based approach by measuring specific experiences of mistreatment behaviours. Specifically, the authors presented respondents with a series of mistreatment behaviours ranging from social exclusion to physical aggression and instructed them to report the frequency in which they had experienced these behaviours in the previous month. As described above, this results in a contaminated measure of mistreatment where the type of aggression experienced and the rate at which it is experienced cannot be separated. In addition, measuring frequency via specific mistreatment behaviours may omit key mistreatment behaviours that are harder to measure or forgotten by the authors. For example, if a respondent is not asked about a specific behaviour they experienced even though it was impactful for them, this would not be reflected in the current measure. Nixon et al. (2021) did not include frequency scores as an indicator variable and instead included it as a control variable. We argue that because frequency is one of the most important distinguishing features of workplace mistreatment (e.g., Hershcovis, 2011; Vranjes & Lyubykh, 2021), there is merit in including frequency in addition to intensity and intentionality as indicators of workplace mistreatment profiles.

Second, we argue that the intensity items used by Nixon et al. (2021) measure negative affective reactions to mistreatment and not intensity. For example, Nixon and colleagues' asked respondents, "In general, how much do these acts upset you?" This item strongly resembles previous measures of affective reactions following mistreatment (e.g., "Did [the perpetrator]

make you feel angry" in Reich & Hershcovis, 2015). Intensity is a feature of the mistreatment one receives rather than an outcome, and therefore references to outcomes like affective reactions do not reflect the underlying concept of intensity.

Finally, Nixon et al. (2021) measured perceived intentionality by asking respondents a follow-up item (e.g., "In general, you feel these acts [of exclusion] were intended to harm you") for each of the mistreatment behaviours they were asked about. Although these items arguably capture perceived intentionality, this measure must be used in combination with their measure of frequency because respondents are asked how much they feel that specific act was meant to harm them. As such, Nixon et al.'s measure of intentionality is limited in terms of its generalizability. Accordingly, in this research we build on Nixon et al.'s findings and previous reviews outlining measurement concerns in the field of workplace mistreatment (e.g., Hershcovis, 2011; Vranjes & Lyubykh, 2021, etc.) to develop a new measure of workplace mistreatment using a feature-based approach.

1.9 Environmental Factors

In addition to developing measures for frequency, intensity, and intentionality, we were also interested in exploring three environmental factors related to mistreatment: perpetrator power, singled-out experiences, and civility climate. Previous meta-analytic research has found that the consequences of experiencing mistreatment are greater when the mistreatment is perpetrated by a supervisor compared to a peer or direct report (Chris et al., 2022). To our knowledge, there is no validated measure of perpetrator power in the workplace mistreatment literature. Instead of measuring perpetrator power directly, power is assessed by examining the source of mistreatment (e.g., Chris et al., 2022). However, power may be interpreted differently by targets and may not be reflected by the perpetrators' job title or hierarchical standing in the

organization (Hershcovis, 2011), and thus there is a need for creating items to measure perpetrator power.

Further, the extent to which one feels alone and singled-out in their mistreatment experience may exacerbate the impact of mistreatment on outcomes (Duffy et al., 2006). Although previous research found support for this by aggregating mistreatment scores at the group-level (e.g., Duffy et al., 2006), we argue there is value in measuring perceptions of singled-out mistreatment experiences. This is because individuals may not be aware of others' mistreatment experiences or may have a different threshold than others regarding what behaviour is deemed unacceptable. For this reason, it may be the feeling of being singled-out – and not necessarily the extent that others experience mistreatment – that is most impactful. As such, we aimed to develop items measuring singled-out mistreatment.

Similarly, the measurement of mistreatment/civility climate in the workplace mistreatment literature has been largely inconsistent and there is not one agreed-upon measure of mistreatment/civility climate (Yang et al., 2014). For example, some scales are aggregated at the organization-level (e.g., Kessler et al., 2008), while others focus on measuring individual perceptions (e.g., Meterko et al., 2007). Further, some scales measure mistreatment climate (e.g., Hutchinson et al., 2008) or violence prevention climate (e.g., Mueller & Tschan, 2011), whereas other scales measure civility climate (e.g., Walsh et al., 2012). Meta-analytic research by Yang and colleagues found that the moderator effects were strongest when measuring perceived civility climate, and as such, we created items that focused on perceptions of civility climate.

1.10 Overview of Empirical Studies

This research aims to bring organization to the workplace mistreatment literature and work towards developing a feature-based measure of mistreatment strength. Study 1 focuses on the creation and validation of the Features of Mistreatment measure (FOM). This measure is comprised of three key features of workplace mistreatment: frequency, intensity, and perceived intentionality. This study involves the generation of an initial set of items, an item-mapping task with subject-matter-experts (SMEs) in Industrial-Organizational Psychology, and a subsequent research survey with a sample of working individuals. Psychometric properties of the scale are assessed using exploratory structural equation modeling (ESEM) and the scale is refined from 28 to 12 items. In addition, a scale for three additional and relevant situational features of workplace mistreatment, perpetrator power, singled-out experiences, and civility climate, is developed. We explore the initial nomological network of our measure with relevant work attitudes (i.e., affective commitment and job satisfaction) as well as trait extraversion and agentic and communal impression management.

In Study 2, we utilize structural equation modeling (SEM) to examine how mistreatment strength as measured by the FOM relates to relevant work attitudes (i.e., affective commitment and turnover intentions) and outcomes (i.e., retaliation). We also utilize bootstrapped mediation analyses in SEM to examine whether negative affective reactions help to explain the relationship between mistreatment strength and our outcome measures. This sample involves hospitality workers and is collected over two time points with a two-week interval between sessions.

Finally, in Study 3, latent profile analysis (LPA) is utilized to examine profiles of workplace mistreatment that emerge from measuring the three features mistreatment. Specifically, we investigate how frequency, intensity, and perceived intentionality act in accordance with one

another to create various ‘profiles’ of mistreatment experiences, and how each latent profile relates to relevant work outcomes. We also examine how each profile relates to three environmental factors related to mistreatment, including perpetrator power, singled-out mistreatment experiences, and civility climate.

Chapter 2

2. Study 1: Construct Clean-up and Scale Validation

Nixon et al. (2021) called on researchers to create a workplace measure that can differentiate between various features of workplace mistreatment. Specifically, Nixon and colleagues argued that "There is a need to develop mistreatment scales that adequately assess important distinctions between mistreatment constructs, such as perceptions of intensity and attributions made about intentions" (p. 18). Following an extensive literature review of relevant workplace mistreatment constructs, focusing specifically on their definitions, distinguishing features, and measurement, we agreed. However, as stated in the introduction, Nixon et al. did not use a feature-based approach to measuring mistreatment, as indicated by their frequency measure and their perceived intentionality measure being associated with specific mistreatment behaviours. Further, we question Nixon et al.'s measure of intensity and argue that it more likely measuring targets' affective reactions to mistreatment than their intensity. Thus, our aim was to create and validate a measure of workplace mistreatment using a feature-based approach. Our literature review led to focusing on three key features of workplace mistreatment that are often inadequately measured or not measured at all: frequency, intensity of mistreatment, and perceived intentionality of mistreatment.

2.1 Scale Development

One of our main objectives for creating a new measure of workplace mistreatment was to separate frequency of mistreatment from behaviours of mistreatment so that we could look at frequency in isolation of specific behaviours. This differs from dominant measures of workplace mistreatment where respondents are asked to rate the extent to which they have experienced a

specific behaviour over a period of time. For example, the WIS measures frequency of incivility by asking respondents, "During the past year, were you ever in a situation in which any of your supervisors or co- workers…" "Interrupted or 'spoke over' you" on a scale of 1 (*never*) to 5 (*many times*). As we were interested in assessing frequency of mistreatment broadly, and not the frequency of specific behaviours, we took a feature-based approach to measurement. We initially generated 10 items that measured frequency of mistreatment using an agreement scale rather than using a traditional frequency scale. That is, responses were measured on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Participants are first asked, "In the past year, have you experienced workplace mistreatment...", with sample items including, "That was frequent", "That occurred daily", and "That happened often." A higher score on this scale indicates a higher rate of experienced mistreatment. The scale instructions were modelled after the Workplace Incivility Scale (WIS, Cortina et al., 2001) and the Negative Acts Questionnaire – Revised (NAQ-R; Einarsen et al., 2009).

In addition to measuring frequency, we also created items to measure intensity of behaviour and perceived intentionality of behaviour. We created new items to measure intensity rather than utilizing the items created by Nixon et al. (2021) as we believed their items reflected negative affective reactions to mistreatment rather than intensity of mistreatment. Accordingly, we generated an initial pool of 10 items to measure intensity. Respondents are asked to state their level of agreement on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The question stem is the same as for the frequency items, (i.e., "In the past year, have you experienced mistreatment…"), and sample items include, "That was severe", "That was extreme", and "That was serious in nature."

To measure perceived intentionality, we created 10 items that tapped into participants' perceptions regarding how intentional the mistreatment they received was. We once again decided to create a new measure of perceived intentionality rather than using the items outlined in Nixon et al. (2021) as their items require the addition of a behaviour-based approach to frequency, and our aim was to measure frequency, intensity, and perceived intentionality using a feature-based approach exclusively. Specifically, Nixon and colleagues' measure of perceived intentionality follows their measure of frequency by first asking respondents how often they have experienced a set of mistreatment behaviours, and then asking how intentional they felt that specific mistreatment behaviour was. We took a different approach to measuring perceived intentionality in isolation from a behaviour-based approach. Responses are measured on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) using the same question stem as with the previous frequency and intensity items (i.e., "In the past year, have you experienced mistreatment …"). Sample items include, "Where you felt someone targeted you at work", "Where you felt someone intentionally mistreated you", and "Where you felt someone purposely took advantage of you." A higher score on this scale indicates a stronger target endorsement of perpetrator's perceived intent to harm.

Although the main scope of this study was to develop and validate a measure of frequency, intensity, and intentionality, we wanted to create additional items that measured perpetrator power, singled-out mistreatment experiences, and civility climate. This is because our literature review suggested that these environmental factors were relevant moderators of ones' workplace mistreatment experiences. As such, we created 10 items to measure perpetrator power. Using the same response format as the FOM, these items were measured on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The question stem for these items is

consistent with the frequency, intensity, and perceived intentionality subscales, with sample items including, “From someone with more decision-making power than you at work”, “From someone that you directly report to”, and “From someone that assigns you work tasks.” A higher score on this measure indicates that the target perceives their perpetrator(s) to be of higher standing in their organization compared to their own standing.

Further, we created 10 items that examined target perceptions of the comparative nature of their workplace mistreatment. Participants were first shown a question stem that stated: “Please think about your workplace and state your level of agreement to the following questions.” Sample items included “I believe that my colleagues are treated with more respect than I am”, “My co-workers do not experience the same rude behaviour that I do”, and “Compared to my co-workers, I am treated with less respect.” Responses were measured on a five-point Likert scale, with a higher score indicating a stronger endorsement of experienced workplace mistreatment in isolation or at a higher rate compared to the targets’ coworkers.

Lastly, we created 10 items to measure perceived civility climate. Sample items include “My workplace is free from bullying”, “There is a culture of civility at my work”, and “Most of my co-workers are respectful and polite.” These items are measured on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*), and participants are first shown the same question stem as the singled-out mistreatment items. A higher score on this scale indicates that the respondent perceives their organization to place high importance on civility and respect within the workplace. As this scale focuses on civility rather than mistreatment, we would expect this measure to be negatively related to the FOM subscales and our measures of perpetrator power and singled-out mistreatment.

In summary, following an extensive literature review (see Chapter 1) and the development of a comprehensive definition of features of mistreatment, we generated an initial item pool to measure frequency, intensity, and perceived intentionality as well as perpetrator power, singled-out mistreatment, and civility climate. Items were developed following guidelines by Hinkin (1998), with items modeled after key components of the workplace mistreatment definition. The initial item pool included 30 items (10 items per subscale).

2.2 Method

Item mapping and scale refinement. Following the generation of items to measure frequency, intensity, perceived intentionality, perpetrator power, singled-out mistreatment experiences, and civility climate, we then assessed the content validity of the scales via an item mapping task. SMEs in Industrial-Organizational Psychology (N = 11) completed a sorting task using an online survey via Qualtrics. SMEs were instructed to organize the 60 initial items into six categories: frequency, intensity, perceived intentionality, perpetrator power, singled-out mistreatment experiences, and civility climate. Because the items generated for frequency, intensity, perceived intentionality, and perpetrator power shared a question stem, SMEs were first shown the definitions for these four categories and were asked to sort the initial 40 items into the category in which the item fit best. The definitions for the four categories are listed below:

> Frequency: the amount of workplace mistreatment that a target experiences occurs on a spectrum of infrequent to frequent. Isolated events over long stretches of time would be considered infrequent, whereas repeated events with short intervals between incidents would be considered frequent.

Intensity: targets perceive the type of workplace mistreatment that they experience on a spectrum of mild to severe. Workplace mistreatment that is perceived as tame in magnitude would be considered mild, whereas workplace mistreatment that is perceived as extreme in magnitude would be considered severe.

Perceived Intentionality of Behaviour: targets perceive the workplace mistreatment that they experience on a spectrum of unintentional to intentional. Workplace mistreatment that is perceived as an inadvertent act to harm the target would be considered unintentional, whereas workplace mistreatment that is perceived as a deliberate act to harm the target would be considered intentional.

Perpetrator Power: perpetrators, defined as the instigators of the workplace mistreatment, can range in their comparative hierarchical power to the target. Perpetrators may or may not have more resources and decision-making power within their organization compared to the target.

SMEs were given an option to take out items that they felt did not represent any of the four categories. An open-ended text box was also provided so that SMEs could describe any additional concerns or thoughts that they had while completing this task.

Once the 40 items for frequency, intensity, perceived intentionality, and perpetrator power were sorted, SMEs were then shown construct definitions for singled-out mistreatment and civility climate. The definitions for the two categories are shown below:

Singled-Out Mistreatment: the extent to which individuals believe that they experience more workplace mistreatment compared to others within their organization.

Civility Climate: perceptions regarding an organizations' practices, procedures, and policies that promote respect and civility within the workplace.

These 20 items were shown separately as they had a distinct question stem from the above subscales. Consistent with the previous task, SMEs were asked to sort these items into one of the two categories that was the best match with the items' content. If SME could not fit an item in any of the category definitions, they could place it into a 'not applicable' category. Further, SMEs were asked to share any additional thoughts they had regarding the appropriateness of these items using an open-ended text box.

Items that failed to be sorted correctly and/or yielded low consistency ratings (< 80% agreement across SMEs) were discarded, resulting in a smaller, more refined pool of items. We also looked to SME feedback and removed or revised any items identified as problematic in their comments. Tables 2-4 display the agreement rate for each initial item for the frequency, intensity, and perceived intentionality subscales. The problematic items identified all fell within the intensity subscale. Accordingly, we removed five intensity items from the initial measure. Items that were removed from the initial intensity subscale included, "That was acute", "That was noteworthy", "That was of significance", "That was substantial", and "That was excessive in nature". Three additional items were added after considering the previous feedback from the item-mapping task and consulting with additional SMEs on the first-authors' advisory committee. The new items included, "That was unreasonably mean", "That was unforgiveable", and "That was completely unjustified." The new, refined scale included eight items to measure intensity.

SME agreement ratings and feedback indicated that our initial items for frequency, perceived intentionality, perpetrator power, singled-out mistreatment, and civility climate were

sufficient, and therefore no further refinements were made at this time. Agreement rates for perpetrator power, singled-out mistreatment, and civility climate measures can be found in Appendix A. Across all six subscales, agreement rates for each item varied between 80.80%-100%, with an average agreement rating of 96.11%. Accordingly, there was considerable agreement between the item mappings and their respective subscales.

Table 2. SME Item Mapping Task for Initial Frequency Items.

Item	% sorted correctly (N = 11)
1. That was frequent.	90.9%
2. That occurred daily.	100.0%
3. That happened often.	90.9%
4. That happened regularly.	100.0%
5. That repeatedly occurred.	100.0%
6. That was constant.	100.0%
7. That became routine.	100.0%
8. That became repetitive.	100.0%
9. That happened over a long period of time.	90.9%
10. That became part of your day-to-day work life.	90.9%

Note. Respondents are first shown an item stem stating, "In the past year, have you experienced workplace mistreatment…"

Table 3. SME Item Mapping Task for Initial Intensity Items.

Item	% sorted correctly (N = 11)
1. That was severe.	100.0%
2. That was extreme.	100.0%
3. That was intense.	90.9%
4. That was serious in nature.	100.0%
5. That was acute.	80.8%
6. That was noteworthy.	80.8%
7. That was of significance.	80.8%
8. That was substantial.	80.8%
9. That was disproportionally harsh.	100.0%
10. That was excessive in nature.	80.8%

Note. Respondents are first shown an item stem stating, “In the past year, have you experienced workplace mistreatment…”

Table 4. SME Item Mapping Task for Initial Perceived Intentionality Items.

Item	% sorted correctly (N = 11)
1. Where you felt someone targeted you at work.	100.0%
2. Where you felt someone intentionally mistreated you.	100.0%
3. Where you felt someone purposely took advantage of you.	90.9%
4. Where you felt someone deliberately wronged you.	100.0%
5. Where you felt someone was “out to get you”.	90.9%
6. Where you felt someone had a personal vendetta against you.	100.0%
7. Where you felt someone was deliberately trying to hurt you.	100.0%
8. Where you felt someone had malicious intent towards you.	100.0%
9. Where you felt someone wanted you to fail.	90.9%
10. Where you felt someone purposely disrespected you.	100.0%

Note. Respondents are first shown an item stem stating, “In the past year, have you experienced workplace mistreatment…”

Scale validation & initial nomological network. Following the item-mapping task, we further assessed the validity of the FOM by giving the initial 28 items assessing frequency, intensity, and perceived intentionality as well as the initial 30 items assessing perpetrator power, singled-out mistreatment, and civility climate to a sample of working individuals. The aim of this study was to examine the psychometric properties of the initial scale, shorten the FOM to 12 items (four items per subscale), and assess the nomological network.

Participants. Participants (N = 343) were recruited via Prolific Academic, an online crowdsourcing platform connecting researchers with participants. The survey took an average of 18 minutes to complete, and participants were compensated £2.50 for their participation. Forty-three participants only responded to 50% of the survey or less and thus were removed. Seventeen participants were removed from the sample because they did not meet the inclusion criteria of working 35 hours per week or more in their current role. One participant was removed for failing two or more attention check questions. The final sample included 282 participants, resulting in a response rate of 82.22%.

Participant ages ranged from 18 to 84 (M = 44.55, SD = 14.38). Demographic information of participants can be found in Table 5.

Table 5. Demographic Percentages for Study 1.

	% of Sample (N = 282)
Gender	
Male	48.9% (n = *138*)
Female	50.4% (n = 142)
Non-Binary	0.4% (n = 1)
Prefer to self-describe	0.4% (n = 1)
Ethnicity	
Asian	5.3% (n = 15)
Black	6.4% (n = 18)
East Asian	5.0% (n = 14)
Hispanic	1.4% (n = 4)
White	77.3% (n = 218)
Prefer to self-describe	4.6% (n = 13)
Work Experience (select all that apply)	
Retail Sales	37.2% (n = 105)
Cashier	18.8% (n = 53)
Office Clerk	27.7% (n = 78)
Food Service/Food Preparation	23.0% (n = 65)
Nurse/PSW	14.2% (n = 40)
Waiter	16.7% (n = 47)
Customer Service	23.0% (n = 65)
Mover	2.8% (n = 8)
Janitor	1.4% (n = 4)
Office Stock	6.0% (n = 17)
Management	34.4% (n = 97)
Education	20.6% (n = 58)
Manufacturing	10.6% (n = 30)
Other	28.0% (n = 79)
Education	
Some High School	3.2% (n = 9)
High School/GED	14.5% (n = 41)
Skilled Trade Certificate	4.6% (n = 13)
Some College	12.4% (n = 35)
2-Year College Diploma	6.7% (n = 19)
Associate Degree	1.4% (n = 4)
Bachelor’s Degree	33.7% (n = 95)
Graduate Degree	21.6% (n = 61)
Other	1.8% (n = 5)

Measures. Participants completed the 28-item FOM, as well as the newly developed measures of perpetrator power (10 items), singled-out mistreatment experiences (10 items), and civility climate (10 items). They also completed common measures of relevant workplace mistreatment constructs to compare the pattern of results for workplace mistreatment as measured by the FOM with other widely-used measures of workplace mistreatment, including the Workplace Incivility Scale (WIS), the Negative Acts Questionnaire – Revised (NAQ-R), and the Abusive Supervision scale. The WIS (Cortina et al., 2001) contains 12 items and is measured on a 5-point Likert scale from 1 (*never*) to 5 (*many times*). Bullying was measured with the 22-item NAQ-R (Einarsen et al., 2009), which contains three subscales including work-related bullying (seven items), person-related bullying (12 items), and physically intimidating bullying (three items). The NAQ-R is measured on a 5-point Likert scale from 1 (*never*) to 5 (*daily*). Participants then responded to the 15-item Abusive Supervision scale (Tepper, 2000), and rated if they had experienced a series of behaviours from 1 (*never*) to 5 (*very often*).

Correlates. In addition to measures of workplace mistreatment, participants responded to a series of measures to examine the nomological network of the FOM. Participants responded to the six-item measure of affective commitment, a subscale of the three-component model of organizational commitment (Allen & Meyer, 1990). This scale contains three reverse-scored items, and all items are measured on a seven-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Participants also responded to the 20-item Minnesota Satisfaction Questionnaire Short-Form (Weiss et al., 1967), which utilizes a five-point Likert scale from 1 (*very dissatisfied)* to 5 (*very satisfied*), Further, we included the 10-item Extraversion measure (Goldberg et al., 2006) from the International Personality Item Pool (IPIP) as well as the 20-item Bidimensional Impression Management Index (BIMI; Blasberg et al., 2014) to assess

discriminant validity and check for common method variance and impression management. Both the IPIP Extraversion and BIMI items were measured on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The BIMI includes two subscales: agentic impression management, which involves overstating ones' social or intellectual status, and communal impression management, which involves separating oneself from socially deviant behaviour. Finally, participants responded to three attention check items dispersed throughout the study to ensure they were paying attention to the survey, as well as seven demographic questions. All Study 1 survey measures can be found in Appendix B.

2.3 Results

Model fit and psychometric properties of scale. Following Cortina et al.'s (2020) checklist for developing psychometrically sound scales in organizational psychology, we used an exploratory approach to assess the best model fit for the data (see Table 6). We first ran an Exploratory Factor Analysis (EFA) with all 28 FOM items by extracting one to three factors to assess initial model fit and factor loadings using Mplus (Muthén & Muthén, 1998-2019). The three-factor EFA (RMSEA = 0.08, CFI = 0.96, and SRMR = 0.02) yielded superior model fit compared with the one-factor EFA (RMSEA = 0.18, CFI = 0.73, and SRMR = 0.09) and two-factor EFA (RMSEA = 0.11, CFI = 0.90, and SRMR = 0.04). To further test our three-factor model, we then ran a three-factor ESEM and three-factor CFA for comparison. The fit indices for both models were good (i.e., RMSEA < .05, CFI > .90, and SRMR < .08), with the three-factor ESEM yielding slightly better fit indices than the three-factor CFA. This was unsurprising because ESEM methods involving multidimensional measures with correlated subfactors are often more appropriate than CFA methods, as CFA methods are more rigid (Brown, 2015). The factor loadings for the full scale three-factor ESEM are displayed in Table 7.

Table 6. Fit indices across models for Study 1 – full 28-item FOM scale.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor EFA	3362.17	350	0.73	0.71	0.18	[0.17, 0.18]	0.09
3-Factor ESEM	473.59*	297	0.97	0.96	0.05	[0.04, 0.05]	0.02
3-Factor CFA	581.69*	346	0.96	0.96	0.05	[0.04, 0.06]	0.03

Note. * indicates $p < .05$.

Table 7. Standardized factor loadings of Full Three-Factor ESEM model for Study 1.

Item	Frequency	Intensity	Intentionality	Residuals
F1	**0.81*** **	0.16	-0.06	0.18***
F2	**0.90*** **	-0.01	-0.01	0.21***
F3	**1.02*** **	-0.08	0.00	0.08***
F4	**0.99*** **	-0.00	-0.05	0.09***
F5	**0.91*** **	-0.02	0.07	0.12***
F6	**0.96*** **	-0.07	0.04	0.13***
F7	**0.91*** **	0.00	0.04	0.11***
F8	**0.97*** **	-0.08	0.06	0.09***
F9	**0.79*** **	0.16	-0.02	0.17***
F10	**0.71*** **	0.29**	-0.06	0.17***
I1	-0.06	**1.05*** **	-0.11	0.15***
I2	-0.07	**0.96*** **	-0.10	0.19***
I3	0.06	**0.89*** **	-0.05	0.20***
I4	-0.09	**0.93*** **	0.05	0.20***
I5	0.13	**0.69*** **	0.10	0.24***
I6	0.16*	**0.58*** **	0.22***	0.19***
I7	0.07	**0.76*** **	0.04	0.28***
I8	0.33***	**0.38*** **	0.23***	0.26***
IN1	-0.02	0.06	**0.86*** **	0.20***
IN2	0.07	0.05	**0.83*** **	0.16***
IN3	0.12	0.01	**0.65*** **	0.46***
IN4	0.04	-0.05	**0.91*** **	0.19***
IN5	-0.11	0.13	**0.88*** **	0.19***
IN6	0.08	-0.04	**0.87*** **	0.21***
IN7	-0.11	0.11	**0.87*** **	0.22***
IN8	-0.02	0.06	**0.87*** **	0.18***
IN9	-0.02	-0.11	**0.97*** **	0.23***
IN10	-0.01	-0.01	**0.88*** **	0.27***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Given that the evidence suggested the data was best represented by a three-factor structure, we then went on to select items that best illustrated each of the factors, with the goal to reduce the final scale to 12 items. These decisions were guided by looking at item content and examining the inter-item correlations and factor loadings, as well as looking at the previous item mapping agreement ratings. Once we selected the final four items per subscale, we re-ran each of the models from Table 6 to check the fit indices of the shortened measure. Three-factor ESEM of the shortened measure yielded excellent fit indices (see Table 8). Correlations among the three factors ranged from r = .69 (frequency and intentionality) to .78 (frequency and intensity). The factor loadings for the shortened scale three-factor ESEM can be found in Table 9. The full and shortened scale items are displayed in Table 10.

Table 8. Fit indices across models for Study 1 – shortened 12-item FOM scale.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor EFA	1198.17	54	0.73	0.66	0.28	[0.26, 0.29]	0.10
3-Factor ESEM	**42.41***	**33**	**1.00**	**0.99**	**0.03**	**[0.00, 0.06]**	**0.01**
3-Factor CFA	65.27*	51	0.99	0.99	0.03	[0.00, 0.05]	0.02

Note. * indicates $p < .05$. Boldface indicates final model.

Table 9. Standardized factor loadings of Shortened Three-Factor ESEM model for Study 1.

Item	Frequency	Intensity	Intentionality	Residuals
F3	**1.04*** **	-0.05	-0.03	0.04*
F4	**0.94*** **	0.03	-0.03	0.10***
F5	**0.89*** **	0.02	0.06	0.12***
F6	**0.89*** **	0.03	0.02	0.15***
I1	-0.03	**1.02*** **	-0.08	0.12**
I2	-0.04	**0.95*** **	0.01	0.16***
I3	0.13*	**0.78*** **	-0.00	0.22***
I4	-0.02	**0.82*** **	0.10*	0.21***
IN1	0.01	0.07	**0.84*** **	0.20***
IN4	0.04	-0.02	**0.88*** **	0.20***
IN8	-0.02	0.05	**0.90*** **	0.15***
IN9	-0.01	-0.07	**0.93*** **	0.25***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Table 10. FOM – Full and Shortened Scale.

Item
Frequency
1. That was frequent.
2. That occurred daily.
3. That happened often.
4. That happened regularly.
5. That repeatedly occurred.
6. That was constant.
7. That became routine.
8. That became repetitive.
9. That happened over a long period of time.
10. That became part of your day-to-day work life.
Intensity
1. That was severe.
2. That was extreme.
3.That was intense.
4. That was serious in nature.
5. That was disproportionally harsh.
6. That was unreasonably mean.
7. That was unforgiveable.
8. That was completely unjustified.
Perceived Intentionality

1. Where you felt someone targeted you at work.

2. Where you felt someone intentionally mistreated you.

3. Where you felt someone purposely took advantage of you.

4. Where you felt someone deliberately wronged you.

5. Where you felt someone was "out to get you".

6. Where you felt someone had a personal vendetta against you.

7. Where you felt someone was deliberately trying to hurt you.

8. Where you felt someone had malicious intent towards you.

9. Where you felt someone wanted you to fail.

10. Where you felt someone purposely disrespected you.

Note. Boldface indicates shortened scale item. Respondents are first shown an item stem stating, "In the past year, have you experienced workplace mistreatment…"

Additional measures. We also examined the psychometric properties of the perpetrator power, singled-out mistreatment, and civility climate items that were created for this study. For each of these three measures, we first ran a one-factor CFA with their full 10 items. We then assessed their fit indices and selected the best four items based on the factor loadings and alignment with theory. We subsequently ran a one-factor CFA for the shortened, four-item measures of perpetrator power, singled-out mistreatment, and civility climate. The fit indices for the one-factor CFAs for the shortened measures of perpetrator power, singled-out mistreatment, and civility climate yielded adequate model fit except for the RMSEA values. However, the RMSEA values can be problematic for simple CFA models with few degrees of freedom, and therefore can be misleading when determining model fit (Kenny et al., 2015). For this reason, we focused specifically on the CFI and SRMR fit indices to determine adequate model fit. The fit indices across the full and shortened scales for perpetrator power, singled-out mistreatment, and civility climate are displayed in Tables 11-13. Further, the factor loadings for the full and shortened scales are displayed in Appendices C-E, and the full and shortened scale items are displayed in Appendix F.

Table 11. Fit indices for full and shortened measure of perpetrator power in Study 1.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor CFA – Full Scale	298.98***	35	.94	.92	.16	[.15, .18]	.02
1-Factor CFA – Shortened Scale	6.31*	2	1.00	.99	.09	[.01, .17]	.02

Note. *** indicates $p < .001$; * indicates $p < .05$.

Table 12. Fit indices for full and shortened measure of singled-out mistreatment in Study 1.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor CFA – Full Scale	102.86***	35	.98	.97	.08	[.07, .10]	.02
1-Factor CFA – Shortened Scale	7.92*	2	.99	.98	.10	[.04, .18]	.01

Note. *** indicates $p < .001$; * indicates $p < .05$.

Table 13. Fit indices for full and shortened measure of civility climate in Study 1.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor CFA – Full Scale	199.74***	35	.88	.84	.13	[.11, .18]	.06
1-Factor CFA – Shortened Scale	39.33***	2	.93	.78	.26	[.19, .33]	.05

Note. *** indicates $p < .001$.

Nomological Network of FOM. Before examining the nomological network of the FOM, we first examined the scales to check for any potential irregularities. As Table 14 shows, the distributions for incivility (WIS, Cortina et al. 2001), person-related bullying and physical intimidation bullying (NAQ-R, Einarsen et al., 2009), and Abusive Supervision (Tepper, 2000) were highly skewed, with a skewness statistic of +1 or higher. That is, the distributions for these measures are skewed right, demonstrating that respondents favoured the lower-half of the Likert-scale (i.e., *strongly disagree* and *disagree*) when responding to these items. Put simply, participants did not report high levels of incivility, person-related bullying, physical intimidation bullying, or abusive supervision. Interestingly, this was not the case for our measures of frequency, intensity, or perceived intentionality; although they did yield positive skewness values, the values did not exceed 1. We speculate that this is due to the difference in measurement of the FOM regarding frequency of mistreatment. Recall that the WIS, NAQ-R, and the Abusive Supervision scale instruct the respondent to report how frequently they have experienced a set of behaviours. It is possible that responses to the FOM are not as skewed as other measures because participants are responding to their experiences of mistreatment generally, and if they have experienced mistreatment that is not represented by the behaviours on the established mistreatment scales, our measure of frequency would still capture this. Accordingly, respondents may favor the lower-half of the Likert-scale for the established mistreatment measures but not for the FOM.

Table 14. Scale descriptives among study variables for Study 1.

	M	*SE*	*SD*	Skewness (*SE*)	Kurtosis (*SE*)
Frequency	2.08	.07	1.17	0.76 (.15)	-0.84 (.29)
Intensity	1.92	.06	1.01	0.97 (.15)	-0.01 (.29)
Perceived Intentionality	2.33	.07	1.22	0.45 (.15)	-1.08 (.29)
Perpetrator Power	2.32	.08	1.33	0.56 (.15)	-1.09 (.29)
Singled-Out Mistreatment	2.17	.06	1.03	0.57 (.15)	-0.64 (.29)
Civility Climate	3.65	.06	0.96	-0.74 (.15)	-0.06 (.29)
Incivility	1.93	.05	0.81	1.06 (.15)	0.54 (.29)
Work-Related Bullying	2.11	.05	0.88	0.65 (.15)	-0.29 (.29)
Person-Related Bullying	1.58	.05	0.77	1.64 (.15)	2.31 (.29)
Physical Intimidation	1.29	.03	0.57	2.46 (.15)	6.23 (.29)
Abusive Supervision	1.57	.05	0.76	1.74 (.15)	2.67 (.29)
Affective Commitment	3.05	.07	1.10	-0.15 (.15)	-0.86 (.29)
Job Satisfaction	3.54	.05	0.79	-0.45 (.15)	-0.09 (.29)
Extraversion	3.23	.05	0.79	-0.21 (.15)	-0.29 (.29)
Agentic Management	2.52	.03	0.49	0.05 (.15)	0.04 (.29)
Communal Management	2.91	.04	0.65	0.16 (.15)	-0.09 (.29)

Note. $N = 282$.

We then examined the correlations among all study variables to look for evidence of convergent and discriminant validity (see Table 15). As expected, the three features of mistreatment were strongly correlated with each other (*r*s = .69 to .78) and yielded significant, moderate to large correlations (*r*s = .48 to .75) with other widely used workplace mistreatment measures (i.e., WIS, NAQ-R, and Abusive Supervision scale). Out of the three features of mistreatment, perceived intentionality yielded the strongest correlations with work attitudes (r_{AC} = -.45, r_{JS} = -.49), whereas intensity yielded the weakest correlations with work attitudes (r_{AC} = -.41, r_{JS} = -.45).

The three features of mistreatment also yielded strong positive relationships with perpetrator power (*r*s = .64 to .65), singled-out mistreatment (*r*s = .65 to .67), and civility climate (*r*s = -.55 to -.59). Of these environmental factors, civility climate was most strongly related to affective commitment (*r* = .57) and job satisfaction (*r* = .68).

To check for discriminant validity, we assessed the correlations between the features of mistreatment and extraversion. Previous meta-analytic research suggests that there is a weak negative relationship between extraversion and incivility (Han et al., 2022) and bullying (Neilson et al., 2017), and thus we expected to find a weak, negative relationship with extraversion with our measures. Frequency yielded a significant, negative correlation (*r* = -.13, a weak effect), whereas the relationships between intensity (*r* = -.06) and perceived intentionality (*r* = -.06) and extraversion were not significant. These correlations are similar to the correlations between extraversion and incivility, bullying, and abusive supervision as measured by the WIS, NAQ-R, and Abusive Supervision scale (*r*s = -.06 to -.14).

To examine if reports of impression management were related to our measures, we examined how each of the features of mistreatment related to agentic and communal impression

management. Frequency, intensity, and perceived intentionality yielded non-significant, near-zero correlations with agentic impression management (*r*s = -.03 to .02) and communal impression management (*r*s = -.08 to .04), suggesting that impression management when responding to the FOM may not be a concern.

As a last step, we conducted a common-method factor to assess for common method variance in MPlus by creating a latent variable that included all 129 study items. We set the variance for the common factor to 1 and fixed the covariances with the other 11 factors at 0 to ensure the shared variance would remain at the item-level (and not variable-level). Using the chi-squared difference test, we calculated the difference in chi-square values between an unconstrained model ($\chi 2$ = 14855.60, df = 7878) and the fully constrained model ($\chi 2$ = 15776.22, df = 8007), and found that Model 1 and Model 2 differed significantly. Thus, we found that the fully constrained model yielded significantly better goodness of fit indices than did the unconstrained model, indicating common method variance could be a concern. We further investigated the shared variance among items by running an equal strengths model. Findings indicated that across the 129 items, the shared variance with the common factor was .17, or approximately 3% shared variance amongst all survey items. We elaborate on this in the discussion.

Table 15. Standardized correlations among Study 1 variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
1. Freq.	.97															
2. Intens.	.78***	.94														
3. Intent	.69***	.73***	.94													
4. Power	.65***	.64***	.65***	.96												
5. Sing. Out	.66***	.67***	.65***	.63***	.94											
6. Civility	-.59***	-.58***	-.55***	-.62***	-.62***	.85										
7. Incivil.	.69***	.67***	.75***	.70***	.70***	-.71***	.94									
8. Work	.64***	.58***	.67***	.75***	.65***	-.66***	.86***	.89								
9. Personal	.64***	.62***	.68***	.62***	.68***	-.68***	.92***	.83***	.95							
10. Phys.	.50***	.48***	.52***	.47***	.49***	-.56***	.86***	.63***	.91***	.76						
11. Abuse	.62***	.60***	.65***	.72***	.61***	-.69***	.84***	.78***	.84***	.75***	.96					
12. Comm.	-.43***	-.41***	-.45***	-.45***	-.47***	.57***	-.47***	-.56***	-.45***	-.29***	-.42***	.89				
13. Job Sat.	-.46**	-.45***	-.49***	-.54***	-.49***	.68***	-.53***	-.60***	-.47***	-.35***	-.53**	.74***	.95			
14. Extrav.	-.13*	-.06	-.06	-.04	-.15*	.21**	-.06	-.14	-.08	-.09	-.10	.33***	.23***	.91		
15. Agentic	-.02	.02	-.03	-.03	-.11	.01	-.08	-.12	-.04	-.09	-.07	.17	.04	.23*	.67	
16. Cmnl.	-.07	.04	-.08	-.06	-.13	.13	-.19**	-.23**	-.12*	-.11	-.10	.03	.07	.03	.34*	.73

Note. Numbers on the diagonal represent internal consistency of scales. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$. Freq. = Frequency of Mistreatment; Intens. = Intensity of Mistreatment; Intent = Perceived Intentionality of Mistreatment; Power = Perpetrator Power; Sing. Out = Singled-out Mistreatment; Civility = Civility Climate; Incivil. = Incivility; Work = Work-Related Bullying; Personal = Person-Related Bullying; Phys. = Physical Intimidation Bullying; Abuse = Abusive Supervision; Comm. = Affective Commitment; Job Sat. = Job Satisfaction; Extrav. = Extraversion; Agentic = Agentic Management; Cmnl. = Communal Management.

Unique effects of FOM and related mistreatment constructs. To assess the unique contributions of the FOM compared to other widely used workplace mistreatment measures in predicting affective commitment and job satisfaction, we conducted Hierarchical Linear Regressions (HLRs). We first entered the established scales (i.e., incivility, work-related bulling, person-related bullying, physical intimidation, and abusive supervision) and then entered the three new scales (frequency, intensity, and perceived intentionality) into the regression. In block three, we entered the measures for perpetrator power, singled-out mistreatment, and civility climate.

Affective commitment. Not surprisingly, we found the established scales significantly predicted affective commitment, $F(5, 256) = 19.60$, $p < .001$, $R^2 = .28$. Of the five workplace mistreatment measures, only work-related bullying ($b = -.39$, $t = -3.39$, $p < .001$) and physical intimidation ($b = .43$, $t = 2.46$, $p = .015$) yielded significant unique relationships with affective commitment. Although physical intimidation yielded a negative zero-order correlation of $r = -.23$, the relationship turned positive when other workplace mistreatment measures were added.

We next examined the Variance Inflation Factor (VIF). The VIF reflects multicollinearity by measuring the correlation size and strength among the predictor variables in the regression model, and a VIF value larger than 5 suggests that the predictor variable shares a large amount of variance with other predictors in the regression model (James et al., 2013). Our analysis indicated two variables of concern regarding multicollinearity: incivility (VIF = 5.36) and person-related bullying (6.27). This overlap may not be surprising given the issues we raised in the introduction.

Adding the newly created measures to the analyses did not increase the variance accounted for, $\Delta F(3, 253) = 1.19$, $p = .316$, $\Delta R^2 = .01$. In other words, the FOM did not predict

variance in affective commitment over and above other widely-used mistreatment measures. In terms of multicollinearity, frequency, intensity, and perceived intentionality yielded VIF values lower than 5 (VIFs = 2.90, 2.79, and 2.64, respectively). This indicates that our feature-based approach to measuring mistreatment results in less shared variance with other measures of mistreatment than does the WIS and the person-related bullying subscale from the NAQ-R. Accordingly, while there is evidence from our previous test of common method variance that there is shared variance among our study measures, the test of multicollinearity among predictors indicates that it is the measures of incivility and person-related bullying that share the most variance on affective commitment (and not our FOM measure).

Interestingly, the third model containing perpetrator power, singled-out mistreatment, and civility climate was significant, $\Delta F(3, 250) = 10.40$, $p < .001$, $\Delta R^2 = .08$. Civility climate yielded a positive relationship with affective commitment ($b = .40$, $t = 5.06$, $p < .001$), but perpetrator power and singled-out mistreatment did not. This suggests that adding civility climate to the model explained variance in affective commitment over and above traditional measures of workplace mistreatment. Perpetrator power, singled-out mistreatment, and civility climate yielded VIF values less than 5 (VIFs = 2.90, 2.41, and 1.87, respectively), suggesting multicollinearity is not a severe concern for these predictors.

We then reversed the order in which the variables were entered into HLR. We entered the three features of mistreatment first, followed by the established mistreatment measures, and lastly entered the three environmental factors related to mistreatment. Frequency, intensity, and perceived intentionality significantly predicted affective commitment, $F(3, 258) = 21.48$, $p < .001$, $R^2 = .20$. Of the three features of mistreatment, only perceived intentionality ($b = -.23$, $t = -3.13$, $p = .002$) yielded a significant unique relationship with affective commitment. Adding the

established mistreatment measures to the analyses accounted for significant unique variance in affective commitment, $\Delta F(5, 253) = 6.17$, $p < .001$, $\Delta R^2 = .09$. Out of the five established mistreatment measured added in block 2, only work-related bullying ($b = -.31$, $t = -3.33$, $p < .001$) yielded a unique significant relationship with affective commitment. Lastly, adding in the three environmental factors further predicted variance in affective commitment, $\Delta F(3, 250) = 10.40$, $p < .001$, $\Delta R^2 = .08$, with civility climate yielded a positive unique relationship with affective commitment ($b = .40$, $t = 5.06$, $p < .001$).

Job satisfaction. A similar pattern was found when job satisfaction was examined. The first model was significant, $F(5, 256) = 24.45$, $p < .001$, $R^2 = 32$. Work-related bullying ($b = -.30$, $t = -3.68$, $p < .001$) and abusive supervision ($b = -.28$, $t = -2.79$, $p = .006$) yielded significant unique relationships with job satisfaction. In terms of multicollinearity, both incivility (VIF = 5.36) and person-related bullying (VIF = 6.27) shared a concerning amount of variance with other predictors in the regression model.

Adding frequency, intensity, and perceived intentionality did not increase the amount of variance accounted for, $\Delta F(3, 253) = 1.99$, $p = .116$, $\Delta R^2 = .02$. We once again found that our feature-based approach to measuring mistreatment resulted in less shared variance with other predictors in the regression model compared to the established scales, as the VIF values for frequency, intensity, and perceived intentionality were less than 5 (VIFs = 2.64 to 2.90).

The third model containing perpetrator power, singled-out mistreatment, and civility climate was significant, $\Delta F(3, 250) = 16.72$, $p < .001$, $\Delta R^2 = .11$. Although the unique relationships for perpetrator power and singled-out mistreatment were not significant, civility climate yielded a positive unique relationship with job satisfaction ($b = .36$, $t = 6.58$, $p < .001$). This suggests that including civility climate in regression models can account for additional

variance on important work outcomes that may not be captured with traditional measures of workplace mistreatment. Additionally, these measures did not share a concerning amount of variance with other predictors in the regression model (VIFs = 1.87 to 2.90).

We once again reversed the order in which the variables were entered into the HLR. We first entered our measures of frequency, intensity, and perceived intentionality, and in the second block we entered the widely-used mistreatment measures. As a last step, we entered the three environmental factors related to mistreatment. Block 1 containing frequency, intensity, and perceived intentionality significantly predicted job satisfaction, $F(3, 258) = 26.90$, $p < .001$, $R^2 = .24$. Although frequency and intensity were not significant unique predictors, perceived intentionality ($b = -.30$, $t = -3.78$, $p < .001$) was a significant predictor of job satisfaction. Block 2 containing the established mistreatment measures accounted for significant unique variance in job satisfaction, $\Delta F(5, 253) = 7.69$, $p < .001$, $\Delta R^2 = .10$. Only work-related bullying ($b = -.33$, $t = -3.63$, $p < .001$) and abusive supervision ($b = -.24$, $t = -2.43$, $p = .016$) yielded unique significant relationships with job satisfaction. Lastly, adding in perpetrator power, singled-out mistreatment, and civility climate added unique variance explained in job satisfaction, $\Delta F(3, 250) = 16.72$, $p < .001$, $\Delta R^2 = .11$, with civility climate yielding a positive unique relationship with job satisfaction ($b = .42$, $t = 6.58$, $p < .001$).

2.4 Study 1 Discussion

The aim of Study 1 was to create and validate a measure of mistreatment strength using a feature-based approach, focusing on frequency, intensity, and perceived intentionality. In the pilot study, we generated an initial item pool for the FOM and had SMEs in I-O Psychology sort the items into their respective subfactors. We gave the refined items from the pilot study to a sample of working individuals to examine the model structure and nomological network of the

FOM. We selected the three-factor ESEM solution and further refined the measure from 28 items to 12. Frequency, intensity, and perceived intentionality were significantly and negatively related to affective commitment and job satisfaction and were weakly related to extraversion and agentic and communal impression management. Other widely used measures of workplace mistreatment were found to be moderately to strongly correlated with the FOM, and yielded similar relationships to affective commitment, job satisfaction, extraversion, and agentic and communal impression management as the FOM.

Limitations and future directions. This research provides a starting-off point for addressing measurement concerns that have plagued the workplace mistreatment literature over the last two decades (e.g., Hershcovis, 2011; Vranjes & Lyubykh, 2021). However, although we created scales to measure perceived frequency, intensity and intentionality, the data suggested that they yield similar relationships to other widely-used mistreatment measures and did not predict work outcomes over and above other measures. This may beg the question: why do we need another measure of workplace mistreatment if it does not add predictiveness above other measures? The FOM takes a unique approach to measuring workplace mistreatment compared to dominant forms of workplace mistreatment measures, and as such, does not measure specific workplace mistreatment behaviours. Instead, the FOM takes a broader approach by examining three important features of workplace mistreatment (frequency, intensity, and perceived intentionality). This is a dramatic difference to the dominant mistreatment measures currently used in research. However, we argue that it is not the behaviours themselves that are important in distinguishing different experiences of workplace mistreatment, but how frequent, intense, and intentional the mistreatment is. This argument is supported by the content overlap among various mistreatment measures that is reflected in Table 1. We speculate that the content overlap of

established mistreatment measures is why we found concerning multicollinearity values for the WIS and person-related bullying subscale of the NAQ-R in our HLR analyses. We also argue that having valid measures for the key features of mistreatment could expand the questions we can ask and the conclusions we draw in the workplace mistreatment literature.

Common method variance may limit the interpretably of our findings, as we used a single-trait, single-method approach for this research. Our objectives for this study were twofold: 1) assess the psychometric properties of the FOM and select the best items for the final scale, and 2) compare the features of mistreatment to related and unrelated measures to assess convergent and discriminant validity. For this reason, measuring variables in different contexts and using a variety of sources to obtain our data was not possible. In these situations, Podsakoff and colleagues (2003) recommend using procedural remedies to reduce the impact of common method variance and examining relationships with a single common factor. Accordingly, we ensured anonymous responding, varied scale anchors when possible, and carefully constructed scale items to avoid asking respondents convoluted or double-barrelled questions that may exacerbate common variance concerns. However, we recognize that the majority of measures included in our study revolved around the measurement of mistreatment, and for this reason we expected there to be some covariance among measures. As expected, when we examined a common single factor including all 129 study items, we found that the fully constrained model yielded significantly better model fit than the unconstrained model, indicating potential common method bias. Follow-up analyses revealed that approximately 3% of variance was shared among all survey items.

In the next study, we expand on this research by testing a new model of mistreatment using the three mistreatment features. More specifically, in Study 2, we examine the

relationships between experienced mistreatment strength and affective commitment, turnover intentions, and retaliation via negative affective reactions using SEM.

In Study 3, we take advantage of the multidimensional nature of the FOM to explore various profiles of workplace mistreatment. We examine the varying levels of general mistreatment strength, frequency, and perceived intentionality across different workplace mistreatment profiles, and examine organizational outcomes associated with profile membership.

Chapter 3

3. Study 2: Test of New Model Using SEM

An abundance of research has linked the experience of workplace mistreatment to a variety of negative outcomes for targets of mistreatment, including negative attitudinal, behavioural, psychological, and physical outcomes (Schilpzand et al., 2016). What is less clear from this area of research is the process through which experienced mistreatment leads to negative target outcomes (Rai & Agarwal, 2017; Schilpzand et al., 2016). A growing body of research has suggested that negative affective reactions mediate the relationship between experienced mistreatment and target outcomes (e.g., Bunk & Magley, 2013; Reich & Hershcovis, 2015). Accordingly, we tested empirically a new model of workplace mistreatment as measured by the FOM to investigate the relationships between experienced mistreatment, important work outcomes, and the mediating role of negative affective reactions. To further assess the psychometric properties of the FOM in this study, we utilized SEM to evaluate the operational components of the model (e.g., factor loadings of items across factors) and to examine the conceptual relationships among latent variables. We collected the data at two time points to establish temporal precedence and mitigate against threats of common method variance (Warner, 2013).

3.1 Study Overview

As described in the introduction, there is theoretical (e.g., Andersson & Pearson, 1999) and empirical (e.g., Hershcovis, 2011) support for the claim that experiencing mistreatment relates to negative outcomes for the target and organization. Experiencing mistreatment has been found to negatively predict affective commitment (e.g., Bowling & Beehr, 2006; Duffy et al., 2002; Mackey et al., 2017; Taylor et al., 2012), as one's emotional attachment to their

organization is, in part, a function of how they are treated (Taylor et al., 2012). When individuals are treated poorly at work, they may become detached emotionally from their organization (Taylor et al., 2012). Possibly the costliest outcome of experiencing mistreatment is its relationship with turnover intent (Donovan et al., 1998; Cortina et al., 2001). Workplace mistreatment has been found to be a reliable predictor of turnover intentions (Bowling & Beehr, 2006; Chiaburu & Harrison, 2008; Djurkovik et al., 2008; Hershcovis, 2011). Further, targets of mistreatment are more likely to later instigate mistreatment (e.g., Baillen et al., 2001; Hershcovis & Reich, 2013; Inness et al., 2005; Lee et al., 2016). We were wanted to see if mistreatment strength would specifically predict target retaliation toward the perpetrator of their mistreatment. We thus propose that mistreatment strength, as measured by target reports of frequency, intensity, and perceived intentionality, will negatively predict affective commitment and positively predict target turnover intentions and retaliation.

> $H_{1a\text{-}c}$: Mistreatment strength as measured by frequency, intensity, and perceived intentionality will be negatively related to target reports of affective commitment (H_{1a}), and positively related to target reports of turnover intentions (H_{1b}) and retaliation (H_{1c}).

However, it is not just the mistreatment event itself that predicts target reactions but rather how one perceives and subsequently appraises the event (Olson-Buchanan & Boswell, 2008). Emotions are a key first step in this process (Lazarus, 1999). Affective events theory (AET; Weiss & Cropanzano, 1996) posits that workplace events lead to emotional reactions that can influence subsequent attitudes and behaviour. AET suggests that positive work events result in positive affective reactions and that negative work events result in negative affective reactions. AET further posits that these emotions play a pivotal role in our attitudes and behaviour following the event (Wiess & Cropanzano, 1996). Previous research suggests that negative work

events result in comparatively stronger affective reactions than positive work events (Taylor, 1991). Accordingly, the accumulation of everyday negative work can lead to adverse outcomes for individuals.

Because workplace mistreatment is likely to be an event of affective significance for targets (Cortina & Magley, 2009), AET can be used to frame research to help understand the mistreatment process (Glasø et al., 2011). In fact, affective reactions have been found to mediate the link between experienced mistreatment and target outcomes (e.g., Bunk & Magley, 2013; Cortina & Magley, 2009; Reich & Hershcovis, 2015). Our aim was to expand these findings using the FOM to examine if this holds true when experienced mistreatment is measured in terms of frequency of mistreatment, intensity of behaviour, and perceived intentionality. As such, we hypothesize that the relationships between experienced workplace mistreatment and target reports of affective commitment, turnover intentions, and retaliation will be mediated by negative affective reactions of the target following their mistreatment.

> $H_{2a\text{-}c}$: The relationships between mistreatment strength and affective commitment (H_{2a}), turnover intentions (H_{2b}), and retaliation (H_{2c}) will be mediated by targets' negative affective reactions after experiencing mistreatment.

3.2 Method

Participants. We recruited 591 participants working in the hospitality industry via various social media platforms (i.e., Reddit, Facebook, Instagram, LinkedIn, and Twitter) and poster advertisements across Southern Ontario. Although many participants opened the survey, 265 participants either did not respond to the survey questions at all or responded to less than 50% of the survey. We removed an additional 45 participants who failed two or more of the attention

check questions, and another 24 participants who failed to meet the inclusion criteria of working a minimum of 10 hours or more in the hospitality industry. Accordingly, we had 257 useable responses, with a response rate of 43.49%. Participant ages ranged from 19 to 71 (M = 33.01, SD = 9.75).

The study took approximately 20 minutes to complete, and participants were entered into a draw to win a C$150 Amazon gift card. At the end of the study, participants were asked if they would be interested in participating in a five-minute follow-up study. Those who were interested provided their contact email and were told they would be sent a survey link in two weeks time.

There were 131 participants that agreed to the five-minute follow-up survey. We removed eight participants for completing less than 50% of the survey. Ten participants were removed because they had failed two or more attention checks in the initial survey, and 21 participants were removed as they appeared to be the same person filling out the survey multiple times. We initially caught this as the survey codes for these 21 participants were not found in the follow up study and so we cross-referenced the email addresses. From there, we found that the descriptives for the two time periods for these participants were inconsistent, and that they had overlapping IP addresses. We further removed three participants who failed to meet the inclusion criteria of working a minimum of 10 hours or more in the hospitality industry for a final N of 89, 34.63% of Time 1 participants.

The follow-up questionnaire took approximately five minutes to complete, and participants were entered into a draw to win a C$250 Amazon gift card as an incentive to stay in the study. Participant ages ranged from 19 to 65 (M = 33.62, SD = 10.81). Demographic information of participants can be found in Table 16.

Table 16. Demographic Percentages for Study 2.

	Time 1 Participants	Time 2 Participants
	% of Sample (*N* = 257)	% of Sample (*N* = 89)
Gender		
Male	22.6% (*n* = 58)	13.5% (*n* = 12)
Female	66.1% (*n* = 170)	77.5% (*n* = 69)
Non-Binary	1.6% (*n* = 4)	2.2% (*n* = 2)
Transgender	0.8% (*n* = 2)	0% (*n* = 0)
Prefer to self-describe	0.8% (*n* = 2)	0.0% (*n* = 0)
Prefer not to say	0.4% (*n* = 1)	2.2% (*n* = 2)
N/A	7.8% (*n* = 20)	4.5% (*n* = 4)
Ethnicity		
Asian	3.1% (*n* = 8)	2.2% (*n* = 2)
Black	3.1% (*n* = 8)	1.1% (*n* = 1)
Hispanic	9.3% (*n* = 24)	3.4% (*n* = 3)
Indigenous	4.7% (*n* = 12)	1.1% (*n* = 1)
Native Hawaiian or Pacific Islander	0.8% (*n* =2)	0.0% (*n* = 0)
White	63.8% (*n* = 164)	78.7% (*n* = 70)
Multiple selected	5.8% (*n* = 15)	5.6% (*n* = 5)
Prefer to self-describe	0.8% (*n* = 2)	0.0% (*n* = 0)
Prefer not to say	1.2% (*n* = 3)	2.2% (*n* = 2)
N/A	7.4% (*n* = 19)	4.5% (*n* = 4)
Country of Residence		
Canada	24.9% (*n* = 64)	16.9% (*n* = 15)
United States	63.0% (*n* = 162)	71.9% (*n* = 64)
Other	4.7% (*n* = 12)	6.7% (*n* = 6)
N/A	7.4% (*n* = 19)	4.5% (*n* = 4)
Current Employment		
Full-time (25+ hours/week)	76.7% (*n* = 197)	83.1% (*n* = 74)
Part-time (10-24 hours/week)	16.0% (*n* = 41)	12.4% (*n* = 11)
N/A	7.4% (*n* = 19)	4.5% (*n* = 4)
Hospitality Experience		
Food Service	12.1% (*n* = 31)	4.5% (*n* = 4)
Waiter	19.8% (*n* = 51)	13.5% (*n* = 12)
Travel/Tourism	6.2% (*n* = 16)	5.6% (*n* = 5)
Lodging	23.7% (*n* = 61)	37.1% (*n* = 33)
Other	14.4% (*n* = 37)	19.1% (*n* = 17)
Multiple selected	20.6% (*n* = 53)	15.7% (*n* = 14)
N/A	3.1% (*n* = 8)	4.5% (*n* = 4)

Measures. Participants responded to the 12-item FOM measure created in Study 1 as well as the previously mentioned measures of perpetrator power, singled-out mistreatment, and civility climate. Each subscale contains four items and is responded to on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Participants also responded to the same workplace mistreatment measures as Study 1, namely the WIS (Cortina et al., 2001), NAQ-R (Einarsen et al., 2009), and Abusive Supervision scale (Tepper, 2000) to compare the nomological network of the FOM with commonly used workplace mistreatment measures.

***Mediator measure*.** Participants completed a 15-item measure of their negative affective reactions following their experience of mistreatment (Bunk & Magley, 2013). Respondents were instructed "You have been previously asked about your experiences with mistreatment at work. Please think about how you were feeling during these interactions and rate your level of agreement to each item". Subscales include measures of target anger ("Frustrated", "Irritated", "Angry"), guilt ("Guilty", "Ashamed", "Regretful"), sadness ("Sad", "Disappointed", "Hurt"), anxiety ("Nervous", "Anxious", "Afraid"), and disgust ("Disgusted", "Repulsed", "Offended") in reaction to experiencing workplace mistreatment. Although participants responded to all 15 items, upon further inspection the subscales measuring guilt and anxiety were less related to measures of experienced mistreatment and the outcome measures. This is evidenced by the subscales measuring guilt (*r*s = .13 to .17) and anxiety (*r*s = .18 to .19) yielding smaller correlations to frequency, intensity, and perceived intensity than did the subscales measuring anger (*r*s = .28 to .35), sadness (*r*s = .23 to .29), and disgust (*r*s = .45 to .48). The same trend was true for affective commitment and turnover intentions: guilt (*r*s = -.17 and .10, *ns*) and anxiety (*r*s = -.15 and.17) yielded weaker relationships compared to anger (*r*s = -.32 and .40), sadness (*r*s = -.32 and .39), and disgust (*r*s = -.38 and .42).

Although the internal reliability was slightly lower when assessing affect as measured by the shortened nine-item (α = .89) versus full 15-item (α = .91) scale, the shortened scale still yielded adequate internal reliability. The inter-item correlation mean of the shortened nine-item scale was slightly higher compared to the full 15-item scale (*M* = .49 compared to *M* = .41). Moreover, the shortened nine-item scale containing the anger, sadness, and disgust items yielded better fit indices (X^2 = 326.61, df = 27, RMSEA = .21 [90% CI lower = .19, 90% CI upper = .23], CFI = .76, TLI = .69, SRMR = .09) than did the full scale (X^2 = 818.74, df = 90, RMSEA = .18 [90% CI lower = .17, 90% CI upper = .19], CFI = .67, TLI = .61, SRMR = .10) apart from RMSEA values.

Based on the above empirical findings, we speculated that anger, sadness, and disgust were the most relevant emotions related to the process of workplace mistreatment. As such, we focused on negative affective reactions to nine items: three items that measure anger, three items that measure sadness, and three items that measure disgust.

***Outcome measures*.** To measure job-relevant outcomes, participants responded to the affective commitment subscale of the Three Component Model of Commitment (Allen & Meyer, 1990), the Turnover Intentions scale (TIS-6; Bothma & Roodt, 2013), and a four-item measure of retaliation following their experience of workplace mistreatment. Sample items of the retaliation measure include “When I have experienced mistreatment at work, I engaged in retaliation” and “When I have experienced mistreatment at work, I stood up for myself by being rude back.”

***Additional measures*.** As we were interested in expanding the nomological network of the FOM, we included two measures of relevant personality traits, extraversion and neuroticism. Extraversion was measured by the 10-item IPIP Extraversion scale, and Neuroticism was

measured by the by the 10-item IPIP Neuroticism scale (Goldberg et al., 2006) Both are measured on a five-point Likert scale and include five positively-keyed and five negatively-keyed items. Further, to examine the relationships of the study variables with impression management, participants responded to the BIMI discussed in Study 1(Blasberg et al., 2014). Finally, participants responded to six demographic questions and three attention-check items dispersed throughout the study. To ensure that all participants were paying attention when responding to the study, participants completed three attention check questions. A sample attention check item includes, “To show that you are reading each question carefully, please choose ‘agree’ as your response to this question”. All measures collected at Time 1 can be found in Appendix G.

The five-minute follow-up study included measures of negative affective reactions, affective commitment, turnover intentions, and retaliation. Participants were asked the same demographic questions to provide a way to match responses in case their participant codes differed between the two times. Time 2 study measures can be found in Appendix H.

Procedure. To establish temporal precedence, we collected data at two time points. At time 1, we collected all relevant study measures including predictor variables, mediator variables, outcome variables, additional relevant measures, and demographic information. Both surveys were conducted online via Qualtrics. We collected all measures at Time 1 in the case the follow-up study had extreme attrition. Participants who agreed to be contacted for the follow-up study were provided with a survey link two weeks after completing the first study. At Time 2, we collected the mediator and outcome variables as well as demographic variables.

3.3 Results

Model fit and psychometric properties of scale. We followed the same process outlined in Study 1 to assess the psychometric properties of the FOM. Like Study 1, the three-factor ESEM yielded superior fit indices to the three-factor CFA (see Table 17). This is consistent with what we would expect, given the limitations associated with CFAs (Morin et al., 2020). Specifically, ESEMs can yield estimations of relationships between latent variables and fit indices like CFA, but they are not as vulnerable to fit issues with multidimensional scales. CFAs force indicators to load onto only one factor and constrain all other factor loadings at 0, and this is often too rigid for multidimensional measures such as the FOM (Marsh et al., 2009). Thus, the three-factor ESEM was once again chosen as our final model. The factor loadings for this model displayed in Table 18. Correlations among factors ranged from r = .72 (intensity and intentionality) to .78 (frequency and intensity). Information on the fit indices and factor loadings for the perpetrator power, singled-out mistreatment, and civility climate measures are found in Appendices I and J.

Table 17. Fit indices across models for Study 2.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor EFA	369.45*	54	0.83	0.79	0.15	[0.14, 0.17]	0.07
3-Factor ESEM	71.27*	33	0.98	0.96	0.07	[0.05, 0.09]	0.02
3-Factor CFA	95.51*	51	0.98	0.97	0.06	[0.04, 0.08]	0.03

Note. * indicates $p < .05$.

Table 18. Standardized factor loadings of three-factor ESEM model for Study 2.

Item	Frequency	Intensity	Intentionality	Residuals
F1	**0.90*** **	-0.04	0.05	0.18***
F2	**0.96*** **	0.03	-0.05	0.11***
F3	**0.86*** **	-0.09	0.11	0.23***
F4	**0.75*** **	0.18*	-0.06	0.28***
I1	0.10	**0.89*** **	-0.11*	0.20***
I2	-0.07	**1.01*** **	-0.06	0.17**
I3	0.07	**0.65*** **	0.12	0.37***
I4	-0.02	**0.68*** **	0.20**	0.32***
IN1	-0.07	0.05	**0.89*** **	0.24***
IN2	0.08	0.02	**0.77*** **	0.27***
IN3	-0.04	0.06	**0.87*** **	0.22***
IN4	0.14	-0.04	**0.74*** **	0.32***

Note. *** indicates $p < .001$; ** indicates $p < .01$;

Test for Attrition. Due to the substantial reduction in participants from Time 1 to Time 2, we conducted an independent samples *t*-test to assess attrition among important study variables. Participants that completed both Time 1 and Time 2 were coded as 0 and labelled 'Stayed', whereas participants that only completed Time 1 were coded as 1 and labelled 'Left'. We included all predictor, mediator, and outcome variables from Time 1 to examine if there was a significant difference in participant responses across measures depending on whether they stayed or left the follow-up study. Across the 10 measures examined, only singled-out mistreatment was found to significantly differ across samples, $t(249) = -2.00$, $p = .046$ (see Table 19). Specifically, participants that completed the follow-up study reported higher levels of singled-out mistreatment experiences compared to participants that *did not* complete the follow-up study. Because only one out of 10 analyses were significant, there is little reason to conclude that the sample who participated in the follow-up session were measurably different than those who only completed the Time 1 session.

Table 19. Independent samples *t*-test for study variables across Time 1 and Time 2.

	Stayed		Left		
	M	*SD*	*M*	*SD*	*t*-test
Frequency	2.91	1.30	2.67	1.15	$t(252) = 1.53$, $p = .127$
Intensity	2.43	1.13	2.33	1.08	$t(252) = 0.64$, $p = .520$
Perceived Intentionality	3.14	1.24	2.88	1.24	$t(252) = 1.64$, $p = .103$
Perpetrator Power	3.04	1.31	2.76	1.32	$t(255) = 1.58$, $p = .116$
Singled-Out Mistreatment	2.37	0.92	2.63	0.98	$t(249) = -2.00$, $p = .046$*
Civility Climate	3.36	1.02	3.48	0.07	$t(247) = -0.83$, $p = .405$
Affective Reactions	2.83	1.03	2.68	0.96	$t(253) = 1.15$, $p = .251$
Affective Commitment	3.03	1.14	3.01	1.00	$t(247) = 0.11$, $p = .911$
Turnover Intentions	3.31	0.98	3.10	0.86	$t(249) = 1.71$, $p = .089$
Retaliation	2.83	1.01	2.91	0.93	$t(201) = -0.63$, $p = .529$

* indicates two-tailed $p < .05$.

Nomological network of FOM. The descriptive statistics for the study variables are presented in Table 20. As can be seen, the responses for the physical intimidation bullying (NAQ-R, Einarsen et al., 2009) are skewed. Consistent with Study 1, the distribution yielded a skewness statistic higher than +1 suggesting that respondents favoured the lower-half of the Likert-scale. This indicates, not surprisingly, that respondents experienced lower levels of physical intimidation. Unlike Study 1, the measures of incivility, person-related bullying, and abusive supervision were not highly skewed in this sample.

Table 20. Scale descriptives among Study 2 variables.

	M	*SE*	*SD*	Skewness (*SE*)	Kurtosis (*SE*)
Frequency	2.75	.08	1.21	0.17 (.15)	-1.12 (.30)
Intensity	2.37	.07	1.10	0.46 (.15)	-0.65 (.30)
Perceived Intentionality	2.97	.08	1.24	-0.20 (.15)	-1.12 (.30)
Perpetrator Power	2.86	.08	1.32	-0.07 (.15)	-1.33 (.30)
Singled-Out Mistreatment	2.54	.06	0.96	0.27 (.15)	-0.67 (.30)
Civility Climate	3.44	.07	1.05	-0.36 (.15)	-0.58 (.31)
Incivility	2.31	.05	0.86	0.58 (.15)	-0.16 (.30)
Work-Related Bullying	2.53	.06	0.91	0.35 (.15)	-0.42 (.30)
Person-Related Bullying	2.05	.06	0.89	0.75 (.15)	-0.16 (.30)
Physical Intimidation	1.64	.05	0.84	1.35 (.15)	1.39 (.30)
Abusive Supervision	1.96	.06	0.90	0.85 (.15)	-0.19 (.30)
Extraversion	3.43	.05	0.80	-0.42 (.15)	-0.54 (.30)
Neuroticism	2.84	.05	0.82	0.27 (.15)	-0.53 (.30)
Agentic Management	2.58	.03	0.51	-0.10 (.15)	-0.18 (.31)
Communal Management	2.94	.04	0.69	-0.01 (.15)	-0.48 (.31)
T1 Negative Affect	2.74	.06	0.99	0.20 (.15)	-0.48 (.30)
T1 Affective Commitment	3.01	.07	1.05	-0.20 (.15)	-0.85 (.31)
T1 Turnover Intentions	3.17	.06	0.91	-0.02 (.15)	-0.78 (.31)
T1 Retaliation	2.88	.07	0.96	0.16 (.17)	-0.77 (.30)
T2 Negative Affect*	2.84	.12	1.10	0.26 (.26)	-0.85 (.51)
T2 Affective Commitment*	3.16	.11	1.01	-0.36 (.26)	-0.73 (.51)
T2 Turnover Intentions*	3.26	.10	0.92	-0.01 (.26)	-0.81 (.51)
T2 Retaliation*	2.90	.12	1.03	0.30 (.28)	-0.69 (.55)

Note. $N = 257$. T1 = Time 1 measures. T2 = Time 2 measures. * indicates $N = 89$.

We then looked at the correlations among all study variables to look for evidence of convergent and discriminant validity. Correlations among all Study 2 variables are displayed in Table 21. The features of mistreatment were strongly correlated with each other (*r*s = .71 to .78) and with other widely used workplace mistreatment measures (i.e., WIS, NAQ-R, and the Abusive Supervision scale; *r*s = .54 to .72). The three features of mistreatment also yielded non-significant correlations with extraversion (*r*s = -.13 to -.07), and significant, positive correlations with neuroticism (*r*s = .32 to .37, a moderate effect).

Regarding Time 1 mediation and outcome measures, frequency yielded the strongest relationships with negative affective reactions (*r* = .45), affective commitment (*r* = -.54), and turnover intentions (*r* = .66). In terms of environmental factors related to mistreatment, singled-out mistreatment was most strongly related to negative affective reactions (*r* = .50), and civility climate was most strongly related to affective commitment (*r* = .64) and turnover intentions (*r* = -.68). Retaliation was not significantly correlated with frequency, perceived intentionality, or any of the environmental factors, but did yield significant small-to-moderate correlations with intensity, incivility, person-related bullying, physical intimidation, and abusive supervision (*r*s = .16 to .30). Moreover, retaliation was negatively related to extraversion (*r* = -.20) and positively related to neuroticism (*r* = .19).

The correlations found with Time 2 measures are consistent with the Time 1 measures except for a few correlations with Time 2 retaliation. Specifically, we did not find significant relationships between Time 2 retaliation and intensity (*r* = .08), person-related bullying (*r* = .10), and extraversion (*r* = -.18). All Time 1 measures yielded strong correlations with their respective Time 2 measures (*r*s = .60 to .88).

We also assessed the correlations between study variables and measures of agentic and communal impression management to check for relationships with impression management. Agentic impression management was negatively related to frequency, intensity, perceived intentionality, perpetrator power, incivility, work-related bullying, person-related bullying, abusive supervision, neuroticism, Time 1 turnover intentions, and Time 2 turnover intentions (*r*s = -.17 to -.55) and positively related to civility climate, extraversion, and Time 2 affective commitment (*r*s = .30 to .51). Further, communal impression management was negatively related to frequency, perceived intentionality, perpetrator power, work-related bullying, neuroticism, Time 1 turnover intentions, Time 1 retaliation, and Time 2 retaliation (*r*s = -.18 to -.52). This suggests that both types of impression management are negatively related to reports of experienced workplace mistreatment and negative work attitudes, a finding we expand on in the study 2 discussion.

Table 21. Standardized correlations among Study 2 variables.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
1. Freq.	.94																						
2. Intensity	.78***	.91																					
3. Intent	.79***	.71***	.92																				
4. Power	.72***	.55***	.71***	.95																			
5. Singled	.56***	.49***	.53***	.60***	.90																		
6. Civility	-.71***	-.60***	-.57***	-.65***	-.61***	.86																	
7. Incivil.	.72***	.69***	.71***	.70***	.70***	-.72***	.93																
8. Work	.72***	.64***	.64***	.68***	.67***	-.80***	.87***	.88															
9. Personal	.67***	.68***	.65***	.62***	.73***	-.71***	.94***	.87***	.94														
10. Phys.	.56***	.65***	.54***	.52***	.62***	-.59***	.86***	.74***	.90***	.79													
11. Abuse	.64***	.64***	.57***	.62***	.67***	-.73***	.86***	.81***	.91***	.88***	.96												
12. Extrav.	-.07	-.10	-.13	-0.23**	-.38***	.25**	-.30***	-.20*	-.29***	-.25**	-.22**	.88											
13. Neurot.	.37***	.32***	.37***	.34***	.30***	-.35***	.46***	.41***	.45***	.41***	.37***	-.49***	.87										
14. Agent.	-.24**	-.17*	-.25**	-.25**	-.13	.30***	-.26**	-.29***	-.20*	-.11	-.17*	.51***	-.55***	.63									
15. Cmnl.	-.23**	-.08	-.18*	-.19*	.07	.13	-.13	-.17*	-.11	-.13	-.13	.07	-.42***	.48***	.75								
16. T1 NA	.45***	.42**	.40***	.45***	.50***	-.48***	.57***	.55***	.56***	.48***	.53***	-.11	.44***	.02	-.07	.85							
17. T1 AC	-.54***	-.40***	-.43***	-.53***	-.63***	.64***	-.62***	-.67***	-.64***	-.55***	-.62***	.29***	-.29***	.15	.03	-.48***	.85						
18. T1 TI	.66***	.47***	.50***	.61***	.52***	-.68***	.64***	.78***	.63***	.52***	.62***	-.16*	.48***	-.22**	-.25**	.53***	-.76***	.86					
19. T1 Ret.	.12	.16*	.13	.09	.07	-.03	.23**	.08	.18*	.30**	.23*	-.20*	.19*	.05	-.33***	.00	-.07	.04	.74				
20. T2 NA	.33***	.43***	.27**	.15	.30**	-.50***	.33**	.36**	.29**	.26*	.30**	-.02	.33**	.01	.01	.60***	-.25*	.37**	-.19	.90			
21. T2 AC	-.59***	-.55***	-.51***	-.53***	-.59***	.75***	-.60***	-.70***	-.57***	.56***	-.59***	.26**	-.38***	.38***	.01	-.49***	.81***	-.64***	.08	-.45***	.85		
22. T2 TI	.73***	.59***	.50***	.56***	.52***	-.71***	.64***	.77***	.63***	.58***	.61***	-.17	.55***	.28*	-.05	.54***	-.68***	.88***	-.06	.53***	-.78***	.89	
23. T2 Ret.	.06	.08	.04	.01	.10	.00	.21*	.13	.10	.29*	.20*	-.18	.34**	.03	-.52***	.12	-.11	.13	.70***	-.01	.05	-.03	.78

Note. Time 1 variables $N = 257$; Time 2 variables $N = 89$. Numbers on the diagonal represent internal consistency of scales. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$. Freq. = Frequency of Mistreatment; Intensity = Intensity of Mistreatment; Intent = Perceived Intentionality of Mistreatment; Power = Perpetrator Power; Singled = Singled-Out Mistreatment; Civility = Civility Climate; Incivil. = Incivility; Work = Work-Related Bullying; Personal = Person-Related Bullying; Phys. = Physical Intimidation Bullying; Abuse = Abusive Supervision; Extrav. = Extraversion; Neurot. = Neuroticism; Agent. = Agentic Impression Management; Cmnl. = Communal Impression Management; T1 NA = Time 1 Negative Affective Reactions; T1 AC = Time 1 Affective Commitment; T1 TI = Time 1 Turnover Intentions; T1 Ret. = Time 1 Retaliation; T2 NA = Time 2 Negative Affective Reactions; T2 AC = Time 2 Affective Commitment; T2 TI. = Time 2 Turnover Intentions; T2 Ret. = Time 2 Retaliation.

Test of hypotheses. We conducted our mediation analyses using 5000 bootstrapped replicates in Mplus (Muthén & Muthén, 1998-2019). SEM was used over traditional mediation methods such as Baron and Kenny's (1986) four-step indirect effects method due to the advantages SEM has with handling two-wave data, increased statistical power (MacKinnon, 2008), and ability to simultaneously assess direct and indirect effects (Gunzler et al., 2013). SEM also allowed for the creation of a latent variable of general mistreatment strength with three indicators (frequency, intensity, and perceived intentionality) rather than conducting three separate mediation analyses for each feature or creating one aggregate variable without considering the three-factor ESEM loadings.

Because the three features of mistreatment yielded strong correlations with each other (*r*s .71 to .78) and related similarly to our mediation and outcome measures, we decided to create an aggregate variable of the three features of mistreatment labelled 'Mistreatment Strength'. We justified this as all three features of mistreatment share an underlying commonality regarding the targets' mistreatment experience. Thus, we used the factor loadings from the three-factor ESEM solution in Table 18 to create an aggregate variable for general workplace mistreatment. In our model, the first-order factor variances were freely estimated and the variance of the higher-order factor (i.e., general workplace mistreatment) was fixed to 1 for identification purposes. We also constrained factor loadings and cross loadings for one item per factor to their exact ESEM values to define a higher-order factor.

Two-wave mediation model. We first examined the mediation model using the predictor variables collected at Time 1 and the mediator and outcome variables collected at Time 2 (see Figure 1). Supporting H_{1a}, (which proposed that mistreatment strength would negatively predict affective commitment), a significant standardized direct effect of mistreatment strength on

affective commitment was found, *c*' = -.49, *se* = .11, 95% percentile CI [-.68, -.28]. However, negative affective reactions did not mediate this effect, (*ab* = -.10, *se* = .06, 95% percentile CI [-.21, .02]), failing to provide support for H_{2a}

We further predicted in H_{1b} that mistreatment strength would predict target turnover intentions. We found support for this as a direct effect of mistreatment strength on turnover intentions was found, *c*' = .58, *se* = .10, 95% percentile CI [.37, .75]. We also found support for H_{2b}, as negative affective reactions significantly mediated this effect, *ab* = .16, *se* = .06, 95% percentile CI [.05, .30]. These results suggest that negative affective reactions are an important mechanism underlying the relationship between experiencing mistreatment and turnover intentions.

Contrary to our predictions, we did not find a significant effect of mistreatment strength on retaliation (*c*' = .01, *se* = .16, 95% percentile CI [-.26, .34]), nor did we find support for a mediation effect (*ab* = -.00, *se* = .10, 95% percentile CI [-.24, .16]). Thus, H_{1c} and H_{2c} were not supported.

Cross-sectional mediation model. We examined the mediation model using Time 1 mediator and outcome variables (see Figure 2). Consistent with the two-wave mediation model, we found a significant direct effect of mistreatment strength on affective commitment, *c*' = -.41, *se* = .07, 95% percentile CI [-.54, -.26]. Although in the two-wave model we found no evidence this effect was mediated by negative affective reactions, this mediation effect was significant at Time 1, *ab* = -.13, *se* = .04 *95*% percentile CI [-.21, -.06]. We speculate that the difference between the two sets of results was due to a lack of statistical power resulting from participant attrition at Time 2.

Congruent with the previous two-wave findings, we found a direct effect of mistreatment strength on turnover intentions at Time 1 (*c*' = .53, *se* = .06, 95% percentile CI [.41, .64]) and this effect was mediated by negative affective reactions (*ab* = .13, *se* = .04, 95% percentile CI [.06, .21]). Thus, we found support that features of mistreatment predicted turnover intentions and that negative affective reactions drove this effect.

We once again failed to find support for mistreatment strength predicting retaliation, *c*' = .18, *se* = .10, 95% percentile CI [-.01, .38]), or a mediated effect of negative affective reactions (Time 1: *ab* = -.04, *se* = .05, 95% percentile CI [-.14, .05]). As such, we did not find support for H_{1c} or H_{2c} in either the two-wave model or in the cross-sectional model with respect to retaliation.

Because agentic and communal impression management were significant correlates of many variables in our model, we re-ran our analyses with agentic and communal impression management as control variables in the models. Across the two-wave and cross-sectional mediation models, the direct and indirect relationships were largely unaffected by the addition of these control variables and the pattern of significance did not change (see Appendices K and L).

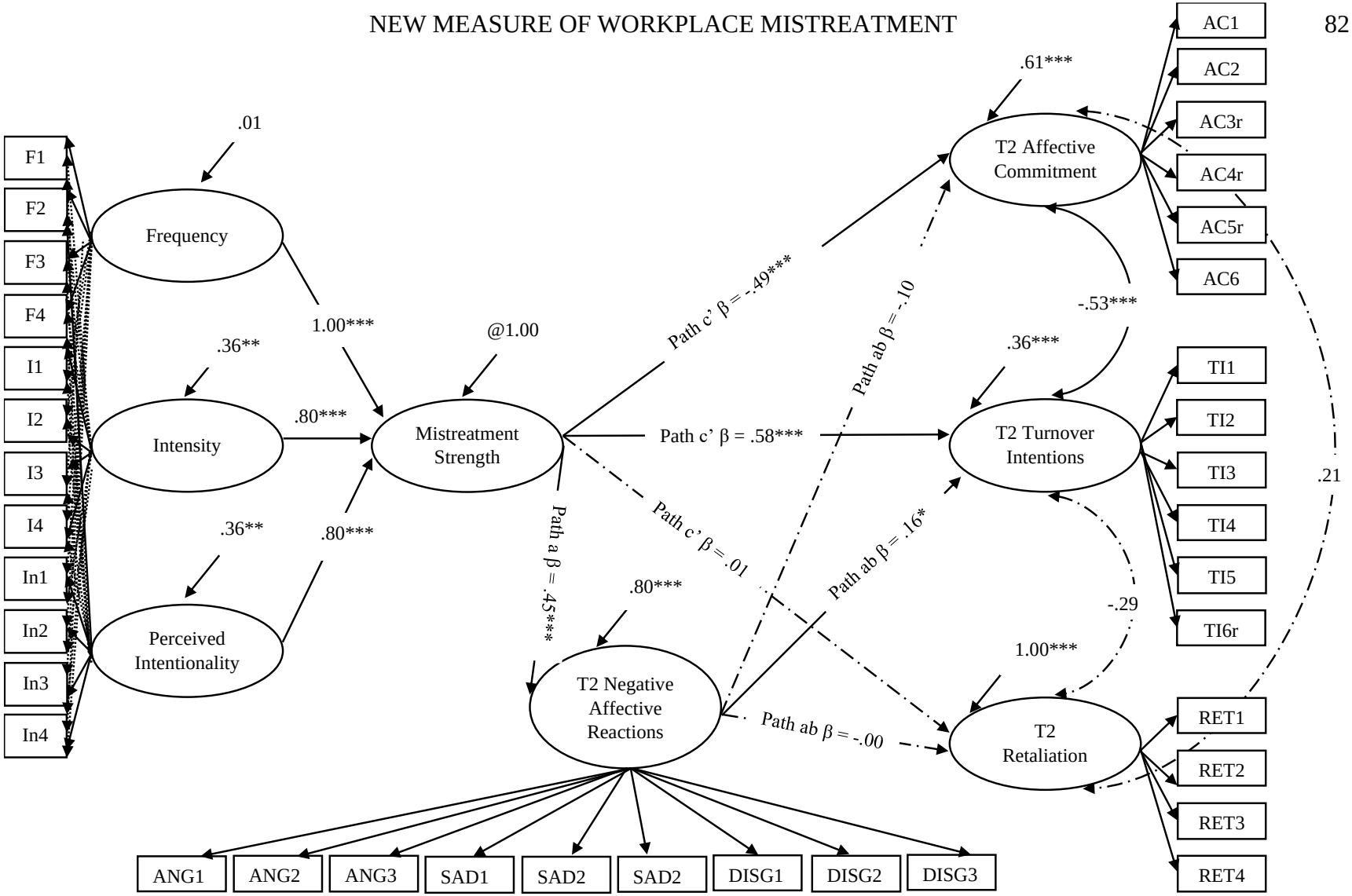

Figure 1. Two-wave SEM Mediation Model.

Note. ** indicates p <.01; *** indicates p <.001. A dotted line between two latent variables indicates p > .05. N = 257.

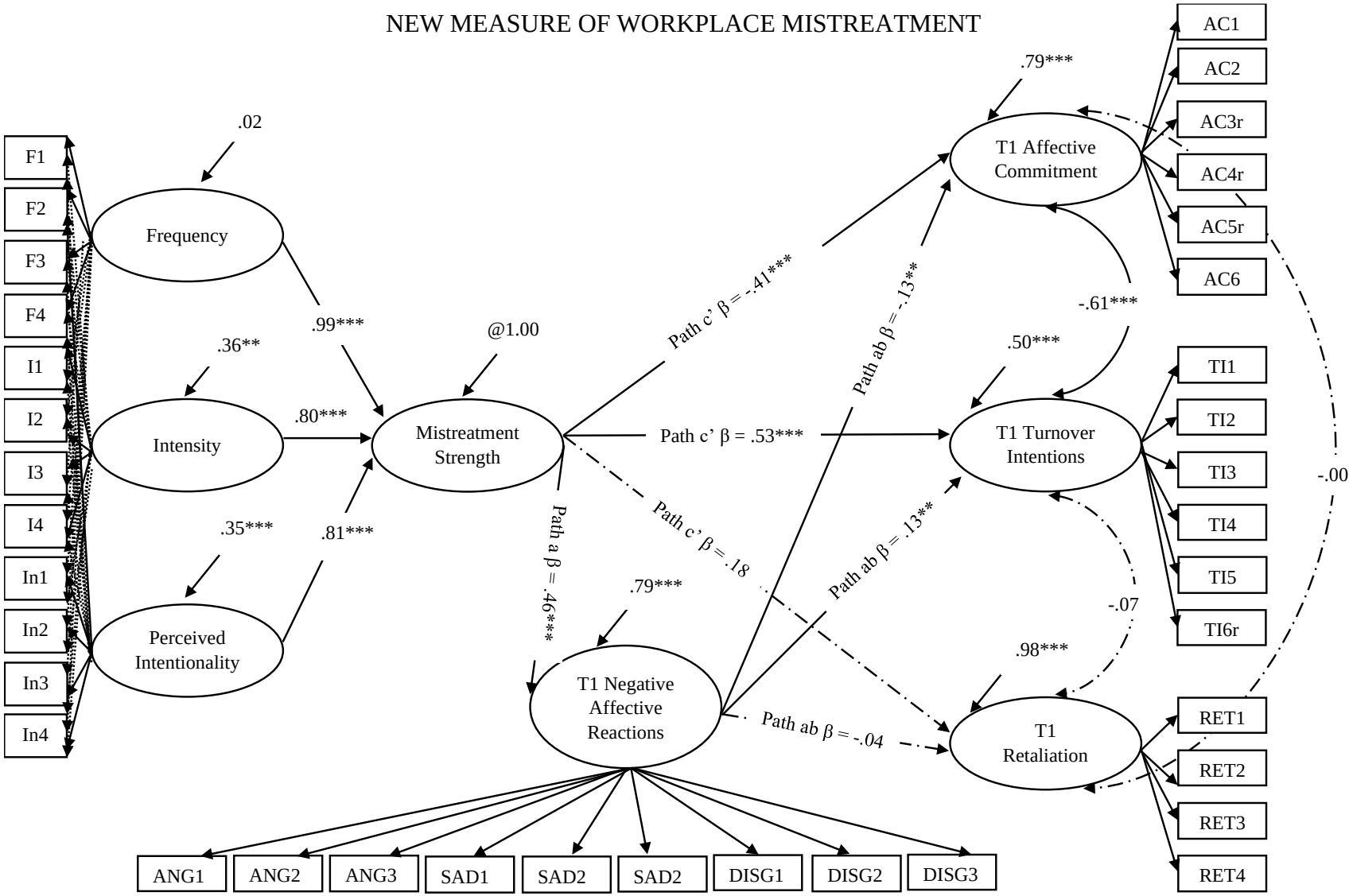

Figure 2. Cross-sectional SEM Mediation Model.

Note. ** indicates p <.01; *** indicates p <.001. A dotted line between two latent variables indicates p > .05. N = 89.

Supplementary analyses. We compared the mediation models that included workplace mistreatment as measured by the FOM with the other measures of workplace mistreatment. Accordingly, we analyzed the two-wave and cross-sectional bootstrapped mediation analyses in MPlus for incivility, bullying, and abusive supervision. As bullying is a multidimensional scale (like the FOM), we followed the same process outlined under the subheading 'Test of Main Hypotheses' to create an aggregate variable for bullying using the factor scores from a three-factor ESEM.

Incivility. Similar to the findings with the FOM, incivility yielded a direct effect on affective commitment (Time 1: *c*' = -.51, 95% percentile CI [-.64, -.36]; Time 2: *c*' = -.44, 95% percentile CI [-.67, -.23]) and turnover intentions (Time 1: *c*' = .51, 95% percentile CI [.37, .63]; Time 2: *c*' = .43, 95% percentile CI [.21, .64]). Interestingly, incivility also yielded a direct effect on retaliation at Time 1 (*c*' = .36, 95% percentile CI [.17, .54]) but not Time 2 (*c*' = .19, 95% percentile CI [-.07, .45]), suggesting incivility predicts retaliation over and above our workplace mistreatment measure.

Negative affective reactions significantly mediated the relationship between incivility and affective commitment at Time 1 (*ab* = -.10, 95% percentile CI [-.20, -.05]) but not Time 2 (*ab* = -.11, 95% percentile CI [-.21, .02]), and between incivility and turnover intentions (Time 1: *ab* = .14, 95% percentile CI [.05, .24]; Time 2: *ab* = .18, 95% percentile CI [.06, .32]). Unlike the analysis using the FOM, negative affective reactions significantly mediated the relationship between incivility and retaliation at Time 1 (*ab* = -.13, 95% percentile CI [-.24, -.02]) but not Time 2 (*ab* = -.03, 95% percentile CI [-.21, .12]).

Bullying. Bullying yielded a significant direct effect on affective commitment (Time 1: *c*' = -.66, 95% percentile CI [-.91, -.44]; Time 2: *c*' = -.70, 95% percentile CI [-.81, -.57]) and

turnover intentions (Time 1: *c*’ = .74, 95% percentile CI [.55, .94]; Time 2: *c*’ = .78, 95% percentile CI [.67, .87]), but not on retaliation (Time 1: *c*’ = .17, 95% percentile CI [-.08, .46], Time 2: *c*’ = .10, 95% percentile CI [-.09, .31]).

However, negative affective reactions did not mediate the effects of bullying on affective commitment (Time 1: *ab* = -.04, 95% percentile CI [-.16, .12]; Time 2: *ab* = -.10, 95% percentile CI [-.21, .12]), turnover intentions (Time 1: *ab* = .05, 95% percentile CI [-.10, .16]; Time 2: *ab* = .15, 95% percentile CI [-.03, .29]), or retaliation (Time 1: *ab* = -.07, 95% percentile CI [-.24, -.07]; Time 2 (*ab* = .02, 95% percentile CI [-.33, .39]).

***Abusive Supervision*.** Abusive supervision yielded similar results to incivility, with significant direct effects found on affective commitment (Time 1: *c*’ = -.51, 95% percentile CI [-.63, -.38]; Time 2: *c*’ = -.41, 95% percentile CI [-.65, -.19]), turnover intentions (Time 1: *c*’ = .47, 95% percentile CI [.34, .63]; Time 2: *c*’ = .40, 95% percentile CI [.19, .61]) and retaliation at Time 1 (*c*’ = .32, 95% percentile CI [.15, .47]) but not Time 2 (*c*’ = .12, 95% percentile CI [-.15, .38]).

Negative affective reactions significantly mediated the relationship between abusive supervision and affective commitment (Time 1: *ab* = -.11, 95% percentile CI [-.19, -.03]; Time 2: (*ab* = -.11, 95% percentile CI [-.21, .02]) as well as turnover intentions (Time 1: *ab* = .15, 95% percentile CI [.06, .24]; Time 2: *ab* = .17, 95% percentile CI [.06, .29]). Negative affective reactions was a significant mediator between abusive supervision and retaliation at Time 1 (*ab* = -.11, 95% percentile CI [-.21, -.00]) but not Time 2 (*ab* = -.03, 95% percentile CI [-.18, .12]). All mediation results for the additional measures of workplace mistreatment are displayed in Table 22.

Table 22. Additional mediation analyses for incivility, bullying, and abusive supervision.

	Time 1 Variables			Time 2 Variables		
Variables	Direct Effect T1 (95% CI)	Indirect Effect T1 (95% CI)	Total Effect T1 (95% CI)	Direct Effect T2 (95% CI)	Indirect Effect T2 (95% CI)	Total Effect T2 (95% CI)
	Mediator Variable: Negative Affective Reactions Dependent Variable: Affective Commitment					
Incivility	-.51***	-.10*	-.61***	-.44***	-.11	-.56***
	[-.64, -.36]	[-.20, -.03]	[-.70, -.51]	[-.67, -.23]	[-.21, .02]	[-.72, -.35]
Bullying	-.66***	-.04	-.70***	-.54**	-.10	-.63***
	[-.91, -.44]	[-.16, .12]	[-.81, -.57]	[-.91, -.21]	[-.21, .12]	[-.84, -.22]
Abusive Supervision	-.51***	-.11**	-.61***	-.41***	-.11*	-.52***
	[-.63, -.38]	[-.19, -.03]	[-.70, -.52]	[-.65, -.19]	[-.19. .00]	[-.70, -.30]
	Mediator Variable: Negative Affective Reactions Dependent Variable: Turnover Intentions					
Incivility	.51***	.14**	.64***	.43***	.18**	.62***
	[.37, .63]	[.05, .24]	[.55, .72]	[.21, .64]	[.06, .32]	[.44, .77]
Bullying	.74***	.05	.78***	.63***	.15	.78***
	[.55, .94]	[-.10, .16]	[.67, .87]	[.32, .93]	[-.03, .29]	[.53, .94]
Abusive Supervision	.47***	.15**	.62***	.40***	.17**	.57***
	[.34, .60]	[.06, .24]	[.53, .71]	[.19, .61]	[.06, .29]	[.36, .74]
	Mediator Variable: Negative Affective Reactions Dependent Variable: Retaliation					
Incivility	.36***	-.13*	.24**	.19	-.03	.16
	[.17, .54]	[-.24, -.02]	[.06, .40]	[-.07, .45]	[-.21, .12]	[-.09, .41]
Bullying	.17	-.07	.10	.02	-.01	.01
	[-.08, .46]	[-.24, .07]	[-.09, .31]	[-.33, .39]	[-.25, .21]	[-.26, .27]
Abusive Supervision	.32***	-.11*	.21**	.12	-.03	.09
	[.15, .47]	[-.21, -.00]	[.06, .37]	[-.15, .38]	[-.18, .12]	[-.15, .31]

Note. Time 1 variables $N = 257$; Time 2 variables $N = 89$.

3.4 Study 2 Discussion

The aim of Study 2 was to validate the FOM and test a new model of workplace mistreatment by measuring mistreatment strength in terms of frequency, intensity, and perceived intentionality. Unlike other dominant measures, this approach incorporated a feature-based approach to measuring workplace mistreatment. The nomological network of the FOM was extended to compare the unique relationships between frequency, intensity, and perceived intentionality with turnover intentions, retaliation, and neuroticism. We utilized SEM so that we could compare fit indices and factor loadings of the previous three-factor ESEM model and conducted mediation analyses to test our model. The model fit and factor loadings were replicated from Study 1, indicating that the FOM yields good model fit with a three-factor ESEM approach across samples.

Regarding our test of direct effects, we found consistent support that experienced mistreatment strength as measured by the FOM significantly predicts important work attitudes. Specifically, workplace mistreatment negatively predicted affective commitment and positively predicted turnover intentions both at Time 1 and Time 2. Contrary to our predictions, we did not find a direct link between experienced mistreatment and retaliation.

We also found that emotional reactions helps to explain the relationship between experienced mistreatment and target outcomes. Specifically, negative affective reactions were an important mechanism for explaining the effect of mistreatment strength on turnover intentions (Time 1 and 2) and affective commitment (Time 1 only). This provides further support for AET (Weiss & Cropanzano, 1996) which posits that negative work events result in negative affective reactions, and this in turn can impact behaviour and attitudes. Interestingly, negative affective reactions did not mediate the relationship between mistreatment and the outcome variables.

Finally, we compared the results of our mediation model with other widely-used workplace mistreatment measures and found that workplace mistreatment as measured by the FOM yielded similar relationships with measures of incivility, bullying, and abusive supervision. However, the direct effects of these measures tended to be slightly larger than did the direct effects of the FOM, particularly regarding their relationships with retaliation. Nevertheless, we believe that the addition of the FOM provides a novel opportunity to assess the key features of mistreatment that other widely-used workplace mistreatment scales do not. Nonetheless, the overall pattern of results across all workplace mistreatment measures used in this study indicates more similarities than differences across scales.

Limitations and future directions. Although this research found insightful and novel results, the study is not without limitations. In an attempt to mitigate the risk of common method variance, we collected the data across two time points. However, there was significant participant attrition for the follow-up study, and therefore the two-wave results were likely underpowered due to a relatively small sample size.

Additionally, although we found strong, consistent support for the relationships between experienced mistreatment and work attitudes (i.e., affective commitment and turnover intentions), we did not find support that experienced workplace mistreatment was directly related to retaliation. We speculate that there are a few reasons for this. First, we believe that behavioural outcomes such as retaliation are a more distal outcome compared to work attitudes and behavioural intentions, with attitudes, subjective norms, and perceived behavioural control predicting behavioural intentions, and behaviour intentions predicting behaviour (Ajzen, 2002). The theory of planned behaviour (Ajzen, 2002; Ajzen & Madden, 1986) posits that attitudes, subjective norms, and perceived behavioural control predict behavioural intentions, which in turn

predict behaviour. Accordingly, the relationship between experienced mistreatment and actual behavioural reactions, such as retaliation, may be weaker in comparison to attitudes and intentions such as affective commitment and turnover intentions. Accordingly, the type of mistreatment one experiences may be just one factor of many that predicts whether one chooses to retaliate. Additional factors are likely to be important are such as the subjective norms of the organization and the targets' perceived behavioural control.

Personality differences may play a more important role in retaliation than in the other outcome measures. We found a small-to-moderate positive correlation between retaliation at Time 1 and 2 and neuroticism, suggesting that as reports of neuroticism increase, so do reports of retaliation. Neuroticism did not appear to play a role in predicting turnover intentions or affective commitment. Future research can further explore the personality differences and situational factors that may predict ones' retaliatory behaviours.

It is possible that the items we used to measure retaliation may have affected our findings. Specifically, we asked the targets of mistreatment, "You have been previously asked about your experiences with mistreatment at work. Please think about your own behaviour after experiencing mistreatment from your co-worker(s)/supervisor(s). If you have not experienced any mistreatment, please select not applicable. When we have experienced mistreatment at work…" with items including, "I engaged in retaliation", "I stood up for myself by being rude back", "I defended myself", and "I matched their rude behaviour". Upon further reflection, we wonder if all respondents have the level of self-insight required to recognize their behaviour as retaliatory. Further, retaliation may be an insidious process that happens over time, and the wording of these items may not capture the gradual nature of retaliation.

Much of the research linking targeted mistreatment to enacted mistreatment is correlational in nature and does not necessarily specify that the previous perpetrator becomes the subsequent target (e.g., Chris et al., 2022; Lee et al., 2016). Because of this, it is possible that targets of mistreatment are more likely to engage in instigated mistreatment toward others, but not necessarily against the initial perpetrator. Such a reaction would not be captured in the measure we used. Future research should expand on the relationship between experienced and instigated workplace mistreatment to assess under which conditions individuals instigate future mistreatment against the perpetrator versus another target (or depart from the situation all together).

Although we found that the relationships between mistreatment strength and affective commitment and turnover intentions were mediated by negative affective reactions, negative affective reactions did not mediate the relationship between experienced mistreatment and retaliation. This finding is inconsistent with recent meta-analytic findings by Chris et al. (2022) that found negative affect mediated the relationship between experienced and instigated incivility. However, instigated incivility is not necessarily directed toward the perpetrator and therefore may not be the same as retaliation. It is possible that the emotional appraisal process individuals engage when mistreatment strength is high is less relevant to retaliation because retaliation may not be a viable option for some targets depending on the specific context of their mistreatment. For example, individuals who are mistreated by their supervisors or customers may avoid retaliation toward their perpetrators and may instead displace their mistreatment toward a direct report or colleague. For this reason, negative affective reactions may be less relevant to retaliation and more important in instigating mistreatment generally.

The question can be raised as to whether impression management played a role in peoples' responses, particularly since there were a number of significant correlations between impression management and some of the workplace mistreatment and work attitude measures. Recall that agentic impression management involves overstating ones' status, whereas communal impression management reflects the desire to manage ones' impressions socially and appear more cooperative than they may be in actuality (Blasberg et al., 2014). We found that all three features of workplace mistreatment were negatively related to agentic impression management, and frequency and perceived intent were negatively related to communal impression management. That is, individuals who were more likely to exaggerate their status were less likely to report frequent, intense, and intentional mistreatment, and individuals who overstated their social cooperation were less likely to report frequent and intentional mistreatment. What is less clear is how to interpret these relationships. One cannot be sure if these relationships were found because those high in agentic and communal impression management actually experience less mistreatment, or if this is an artifact of participants' managing their responses to survey items. Both could logically be true: individuals who are high in impression management may report less mistreatment, but they also may experience less mistreatment *because* they are high in impression management. Specifically, individuals who are careful to present themselves as having high status and being cooperative may be less likely to experience mistreatment from their colleagues.

Workplace mistreatment researchers have previously expressed concern that impression management might be influencing responses to mistreatment experiences (e.g., Guo & Kumar, 2020; Kabat-Farr & Cortina, 2012, Miranda et al., 2020), and social desirability has been found to be negatively related to instigated workplace mistreatment (e.g., Parkins et al., 2006). Kabat-

Farr and Cortina argued that a fruitful area of future research in the field of workplace mistreatment involves utilizing innovative approaches such as peer and supervisor reports to get around impression management challenges. While we echo this statement, these approaches bring their own measurement concerns and will likely not solve this issue entirely.

In some of our analyses, the widely used measures of mistreatment fared better than the FOB, particularly with respect to retaliation. Keep in mind that measures for incivility, bullying, and abusive supervision instruct a respondent to answer whether they have experienced a series of mistreatment behaviours on a frequency scale of varying labels. In contrast, the FOM instructs respondents to answer about their mistreatment regarding the frequency at which they experience it, how intense they perceive it to be, and how intentional they perceive it to be. It is possible that these slight differences in results reflect actual differences – that is, reports of specific experienced behaviours may be more predictive of outcomes than are reports of frequency, intensity, and perceived intentionality. However, we still believe that the FOM captures important definitional components that other measures of mistreatment do not. Perhaps in the future, the FOM can be combined with scales such as the WIS, NAQ-R, and abusive supervision scale for a more comprehensive understanding of workplace mistreatment.

Study 2 conclusions. In this study, we examined a new model of workplace mistreatment that included three important definitional components of mistreatment that are rarely measured – frequency, intensity, and intentionality. We found support that workplace mistreatment as measured by the FOM was related to affective commitment and turnover intentions, and these effects were mediated by negative affective reactions of the target.

In Study 3, we take advantage of the multidimensional nature of the FOM and utilize LPA to assess various profiles of experienced workplace mistreatment. Using a person-centered

approach such as LPA enables us to expand workplace mistreatment research to determine the features of workplace mistreatment that combine into different profile types for individuals experiencing mistreatment. This approach will allow us to examine how individuals experiencing varying levels of the three features fare in terms of important work outcomes and can suggest if one or more mistreatment feature drives these effects. Further, we can look at various antecedents of profile membership to assess what predicts ones' mistreatment experience in terms of their frequency, intensity, and perceived intentionality.

Chapter 4

4. Study 3: Person-Centered Analyses

In addition to utilizing variable-centered approaches to extend our knowledge on workplace mistreatment as measured by the FOM, we further aimed to assess how frequency, intensity of behaviour, and perceived intentionality combine across individuals using a person-centered approach. Our objective was to bring further clarity and organization to the workplace mistreatment literature by conducting an LPA to examine profiles of workplace mistreatment that emerge from the three features of mistreatment. Further, we looked at three important workplace outcomes (i.e., affective commitment, turnover intentions, and retaliation) and three additional environmental factors related to mistreatment (i.e., perpetrator power, singled-out mistreatment, and civility climate) to examine how individuals across various profiles fare on these measures.

4.1 Study 3 Overview

As discussed in the introduction, Nixon et al. (2021) assessed clusters of workplace mistreatment using latent class analysis to analyze target reports of intensity and intention attributions. The authors found support for four clusters of workplace mistreatment: a bullying cluster, an incivility cluster, and two clusters representing moderate experienced mistreatment. Nixon et al. further found that individuals in the bullying cluster reported significantly higher rates of psychological strain and turnover intentions than individuals in the incivility cluster.

Recall that Hershcovis (2011) found meta-analytic support that widely-used measures of incivility and bullying relate similarly to important work outcomes, even though bullying is theoretically more extreme and harmful than incivility. Nixon and colleagues (2021) found that

intensity and intentionality of behaviour can distinguish workplace mistreatment constructs. That said, there are two weakness with the approach of Nixon et el. First, Nixon et al. did not include frequency of mistreatment as a profile indicator. Yet, as we have argued throughout this thesis, frequency is an important distinguishing feature among various workplace mistreatment constructs. Second, the items used by Nixon et al. to measure intensity actually reflect negative affective reactions to experienced mistreatment. For example, one intensity item by Nixon and colleagues is, “In general, how much do these acts upset you”, and a sample negative affective reactions to mistreatment item by Reich and Hershcovis (2015) includes, “Did [the perpetrator] make you feel angry”. Thus, there is good reason to conduct an LPA using the FOM with its specific measures of frequency, intensity, and perceived intentionality.

Consistent with Nixon et al. (2021), we expect that the key features of mistreatment will be reflected in different profiles of workplace mistreatment. As the three key features of mistreatment are highly correlated (i.e., .65 to .79), we intend to utilize a bi-factor S-1 ESEM model, where the G-factor reflects general mistreatment strength, and S-factors frequency and perceived intentionality reflect that remaining unique factor variance.

H_1: The application of LPA to FOM data will identify multiple profiles with different configurations of the G-factor mistreatment strength, frequency, and perceived intentionality (i.e., we will find qualitative differences among profiles).

We were also interested in examining how various profiles of workplace mistreatment would relate to important work-related outcomes. Within the mistreatment literature, many mistreatment constructs have been found to negatively predict affective commitment (e.g., Bowling & Beehr, 2006; Duffy et al., 2002; Mackey et al., 2017; Taylor et al., 2012). Typically, employees’ emotional attachment to their organization reflects, in part, how they are treated, and

if they are treated negatively (as is the case with mistreatment), they may feel less emotionally attached to their organization (Taylor et al., 2012). Consistent with this, Nixon et al. (2021) found that affective commitment was strongest for individuals experiencing incivility and weakest for individuals experiencing bullying. Accordingly, we were interested in assessing how profiles of varying levels of mistreatment strength, frequency, and perceived intentionality would relate to affective commitment. We were particularly interested in examining what profile(s) would yield the highest (lowest) scores on affective commitment.

Research Question (RQ)$_1$: How do profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to affective commitment?

Experiencing mistreatment has been consistently found to relate to withdrawal behaviours, specifically turnover intentions (e.g., Bowling & Beehr, 2006; Chiaburu & Harrison, 2008; Djurkovik et al., 2008; Hershcovis, 2011). Nixon et al. (2021) found that turnover intentions were strongest for individuals experiencing severe forms of mistreatment (i.e., bullying) and weakest for individuals experiencing incivility. Our second research question involved examining how profiles of varying levels of mistreatment strength, frequency, and perceived intentionality would relate to turnover intentions. Specifically, which profile(s) yield(s) the highest scores on turnover intentions? Further, which profile(s) yield(s) the lowest scores on turnover intentions?

RQ$_2$: How do profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to turnover intentions?

One of the most consistent findings in the mistreatment literature is that the targets of mistreatment are more likely to become the perpetrators of mistreatment (e.g., Baillen et al.,

2001; Hershcovis & Reich, 2013; Inness et al., 2005; Lee et al., 2016). In other words, they are more likely to retaliate. This aligns with foundational framework for understanding workplace mistreatment, such as Andersson and Pearson's (1999) 'incivility spiral' in which subtle acts of mistreatment lead to more frequent and severe instances of mistreatment as the target retaliates that behaviour. Specifically, when one experiences incivility, one might react with negative affect and a desire to reciprocate. This could lead to retaliation (Andersson & Pearson, 1999). This kind of escalation can lead to a 'tipping point' between the individuals where the mistreatment is no longer low-level and ambiguous. Thus, we were interested in examining how profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to retaliation. For example, what profile(s) yields the highest (lowest) scores on retaliation?

RQ$_3$: How do profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to retaliation?

In addition to examining outcomes of the various mistreatment profiles, we were interested in exploring how profiles related to three additional environmental factors related to workplace mistreatment: perpetrator power, singled-out mistreatment, and civility climate. Meta-analytic research has found perpetrator power to be an important moderator of experienced mistreatment and work-related attitudes and intentions (Chris et al., 2022). Specifically, the relationships between experienced mistreatment and affective commitment, job satisfaction, and turnover intentions are stronger for targets of supervisor-enacted mistreatment compared to mistreatment enacted by peers or direct reports. As such, we were interested in examining how profiles of varying levels of mistreatment strength, frequency, and perceived intentionality related to perpetrator power. Specifically, which profile(s) yields the highest (lowest) scores on perpetrator power?

RQ$_4$: How do profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to perpetrator power?

We were also interested in assessing the relationships of various profiles with singled-out mistreatment, as feeling alone in the experience of mistreatment has been found to exacerbate the relationship between experienced mistreatment and outcomes for targets (e.g., Duffy et al., 2006). Accordingly, we were interested to see which profile(s) yielded the highest score(s) on singled-out mistreatment, and which profile(s) yielded the lowest score(s) on singled-out mistreatment.

RQ$_5$: How do profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to singled-out mistreatment?

Finally, civility climate has been found to negatively predict instigated mistreatment (Park & Martinez, 2022) and positively predict organizational commitment and job satisfaction (Yang et al., 2014), suggesting that it may help to buffer against experienced mistreatment. As such, we were interested in examining each profiles' relationship to civility climate to see which profile(s) yielded the highest score(s) on civility climate, and which profile(s) yielded the lowest scores on civility climate.

RQ$_6$: How do profiles of varying levels of mistreatment strength, frequency, and perceived intentionality relate to singled-out mistreatment?

4.2 Method

Participants. We recruited 845 working individuals through Prolific Academic. Forty-two participants were removed because they did not complete at least half of the survey. One person was removed for failing two or more attention checks, and 23 individuals who did not

meet the inclusion criteria of working a minimum of 10 hours per week were eliminated. Thus, our final sample included 779 participants, indicating a response rate of 92.19%. Participants ranged in age from 18 to 75 (M = 38.08, SD = 11.94). Information regarding demographic percentages for Study 3 participants is displayed in Table 23.

Table 23. Demographic Percentages for Study 3.

	% of Sample (N = 779)
Gender	
Male	50.8% (n = 396)
Female	47.6% (n = 371)
Non-Binary	0.8% (n = 6)
Transgender	0.1% (n = 1)
Prefer not to say	0.7% (n = 5)
Ethnicity	
Asian	6.5% (n = 51)
Black	4.9% (n = 38)
Hispanic	0.5% (n = 4)
Middle Eastern	0.4% (n = 3)
White	84.3% (n = 657)
Multiple selected	1.7% (n = 13)
Prefer to self-describe	0.9% (n = 7)
Prefer not to say	0.8% (n = 6)
Residence	
Canada	6.9% (n = 54)
USA	7.4% (n = 58)
UK	84.6% (n = 659)
Other	1.0% (n = 8)
Employment Type	
Full-Time (25+ hours/week)	77.7% (n = 605)
Part-Time (10-24 hours/week)	17.1% (n = 133)
Part-Time (> 10 hours/week)	4.7% (n = 37)
Prefer not to say	0.5% (n = 4)
Work Experience (select all that apply)	
Retail Sales	36.2% (n = 282)
Cashier	20.9% (n = 163)
Office Clerk	29.1% (n = 227)
Food Service/Food Preparation	17.6% (n = 137)
Nurse/PSW	8.5% (n = 66)
Waiter	13.0% (n = 101)
Customer Service	25.4% (n = 198)
Mover	5.3% (n = 41)
Janitor	2.8% (n = 22)
Office Stock	9.1% (n = 71)
Management	30.2% (n = 235)
Education	22.5% (n = 175)
Manufacturing	9.2% (n = 72)
Other	22.8% (n = 178)

Measures. Unless otherwise specified, all items were measured on a five-point Likert scale. Participants completed the 12-item FOM as well as 12 items measuring perpetrator power (four items), singled-out mistreatment (four items), and civility climate (four items). To measure important job outcomes, participants completed the affective commitment subscale of the Three Component Model of Commitment (Allen & Meyer, 1990; measured on a seven-point Likert scale), the Turnover Intentions scale (TIS-6; Bothma & Roodt, 2013), and the previously mentioned items from Study 2 measuring retaliation. Consistent with studies 1 and 2, we included the Bidimensional Impression Management Index (BIMI; Blasberg et al., 2014) to check for impression management. This scale includes two sub-factors measuring agentic impression management and communal impression management. Participants answered three attention-check questions randomly presented throughout the study, and lastly completed a short demographic questionnaire. All Study 3 measures can be found in Appendix M.

4.3 Results

Model fit and psychometric properties of scale. We followed the same process outlined in studies 1 and 2 to check for consistency of psychometric properties of the FOM. As was found in studies 1 and 2, the three-factor ESEM yielded superior fit indices compared to the one-factor EFA and three-factor CFA (see Tables 24 and 25).

Table 24. Fit indices across models for Study 3 FOM.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
1-Factor EFA	1228.52*	54	0.76	0.71	0.17	[0.16, 0.18]	0.09
3-Factor ESEM	59.27*	33	0.10	0.99	0.03	[0.02, 0.05]	0.01
3-Factor CFA	172.11*	51	0.98	0.97	0.06	[0.05, 0.06]	0.03
Bi-Factor ESEM	35.49*	24	0.10	0.99	0.03	[0.00, 0.04]	0.01
Bi-Factor S-1 ESEM	58.93*	33	0.10	0.99	0.03	[0.02, 0.05]	0.01

Note. * indicates $p < .05$.

Table 25. Standardized factor loadings of three-factor ESEM model for Study 3.

Item	Frequency	Intensity	Intentionality	Residuals
F1	**0.88*** **	-0.05	0.07**	0.20***
F2	**1.04*** **	-0.10***	-0.01	0.09***
F3	**0.89*** **	0.05	0.00	0.15***
F4	**0.76*** **	0.18***	-0.06*	0.24***
I1	0.10*	**0.85*** **	-0.04	0.17***
I2	-0.10*	**1.05*** **	-0.10***	0.16***
I3	0.08	**0.76*** **	0.06	0.25***
I4	0.01	**0.70*** **	0.21***	0.28***
IN1	0.08	0.05	**0.77*** **	0.25***
IN2	0.02	0.02	**0.86*** **	0.22***
IN3	-0.07*	0.07*	**0.91*** **	0.16***
IN4	0.02	-0.08	**0.88*** **	0.30***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Although the three-factor ESEM was selected as our final model for studies 1 and 2, we examined the fit indices and factor loadings of a bi-factor solution for our planned analysis in Study 3. When using LPA with multidimensional measures that have highly correlated factors, it is common to find non-distinct profiles (Schmitt et al., 2018). Because of this, often bi-factor solutions are used in LPA research involving multidimensional measures. A bi-factor model allows all items on a measure to load onto a general factor in addition to specific factors and therefore concerns of shared variance between the factors are reduced (Bureau et al., 2023). In study 2 and 3, the bi-factor solution yielded good fit indices across all three studies (see Table 26). However, the factor loadings for one of the subscales, Intensity, did not load well after the variance for the general mistreatment factor was removed (see Tables 27-29). This was further evidenced by the negative residual variance found for item I4 in Study 2. As stated by Burns and colleagues (2020, pp. 883) "One or more specific factors often have variance estimates that are close to zero, negative, and/or non-significant [for symmetrical bi-Factor solutions]. By definition, variances cannot be negative. Negative variance estimates have no meaningful interpretation and are seen as inadmissible parameter estimates."

Recent research (i.e., Bureau et al., 2023; Burns et al., 2019; Heinrich et al., 2020; Thöne et al., 2021) has suggested a revised bi-factor model termed the 'bi-factor S-1 model' has some advantages over a regular bi-factor model. Unlike the typical fully symmetrical bi-factor model, a bi-factor S-1 model allows for one or more specific-factors (S-factors) to be unequally related to the general-factor (G-factor; Bureau et al., 2023; see Figure 3a & 3b). Regular bi-factor models involve one S-factor per subscale, and these S-factors are theoretically interchangeable (Eid et al., 2017). This does not work well when S-factors relate asymmetrically to the G-factor, as this often results in low and non-significant G- or S-factor loadings (Heinrich et al., 2020).

When the S-factor yields non-significant loadings, the shared variance between the S-factor and G-factor could indicate that they are not conceptually distinct. For example, Bureau and colleagues (2023) utilized a bi-factor S-1 model for their research on the continuum of self-determination. They found that removing the S-factor Intrinsic Motivation and anchoring the G-factor as "self-determination" yielded superior model fit and interpretation compared to the standard, fully-symmetrical bi-factor model.

We believed that the S-factors in the model (frequency, intensity, and perceived intentionality) were asymmetrically related to the G-factor, with intensity sharing more variance with the G-factor than frequency and perceived intentionality. Due to the asymmetrical nature of shared variance among the S-factors with the G-factor, a standard bi-factor model would not be appropriate. We speculate that intensity the underlying trait captured by the G-factor is conceptually similar to intensity of mistreatment, and therefore we consider the G-factor an indication of general mistreatment strength.

As such, we conducted a bi-factor S-1 solution where the Intensity items loaded onto the general mistreatment factor, but the Intensity S-factor was removed. We followed the approach outlined by Thöne et al., whereby an oblique target rotation was used to allow items to load freely on their intended factors and minimize cross-loadings on their unintended factors. All analyses were conducted in Mplus version 8.4 (Muthén & Muthén, 1998-2019). The bi-factor S-1 ESEM yielded good model fit and easily interpretable results (see Tables 30-32). Because the shared variance among all 12 items is accounted for by the G-factor, the correlation between frequency and intentionality (r = .36) can be interpreted as a partial correlation (Eid et al., 2017).

The fit indices and factor loadings of the one-factor CFA models for perpetrator power, singled-out mistreatment, and civility climate can be found in Appendices N and O.

Table 26. Fit indices of bi-factor models across studies 1-3.

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
Study 1 – Full Scale							
Bi-Factor ESEM	403.04*	272	0.98	0.97	0.04	[0.03, 0.05]	0.01
Bi-Factor S-1 ESEM	473.59*	297	0.97	0.96	0.05	[0.04, 0.05]	0.02
Study 1 – Shortened Scale							
Bi-Factor ESEM	25.95*	24	1.00	1.00	0.02	[0.00, 0.05]	0.01
Bi-Factor S-1 ESEM	42.41*	33	1.00	0.99	0.03	[0.00, 0.06]	0.01
Study 2 – Shortened Scale							
Bi-Factor ESEM	42.52*	24	0.99	0.97	0.06	[0.03, 0.08]	0.01
Bi-Factor S-1 ESEM	71.27*	33	0.98	0.96	0.07	[0.05, 0.09]	0.02
Study 3 – Shortened Scale							
Bi-Factor ESEM	35.49*	24	0.10	0.99	0.03	[0.00, 0.04]	0.01
Bi-Factor S-1 ESEM	58.93*	33	0.10	0.99	0.03	[0.02, 0.05]	0.01

Note. * indicates $p < .05$.

Table 27. Standardized factor loadings of shortened bi-factor ESEM model for Study 1.

Item	General	Frequency	Intensity	Intentionality	Residuals
F3	0.65***	**0.74*** **	-0.02	-0.00	0.04*
F4	0.70***	**0.66*** **	0.00	-0.04	0.10*
F5	0.75***	**0.61*** **	-0.03	-0.02	0.10*
F6	0.59***	**0.66*** **	0.06	0.07	0.13*
I1	0.68***	-0.03	**0.69*** **	-0.06	0.12*
I2	0.67***	-0.03	**0.65*** **	0.01	0.16*
I3	0.67***	0.09	**0.53*** **	-0.01	0.22*
I4	0.66***	-0.01	**0.57*** **	0.07	0.21*
IN1	0.73***	-0.02	0.01	**0.52***	0.20*
IN4	0.67**	0.03	-0.02	**0.58****	0.21*
IN8	0.75***	-0.05	-0.01	**0.56***	0.14*
IN9	0.50*	0.04	0.01	**0.76*** **	0.15

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Table 28. Standardized factor loadings of bi-factor ESEM model for Study 2.

Item	General	Frequency	Intensity	Intentionality	Residuals
F1	**0.67*** **	**0.59*** **	0.02	0.02	0.18***
F2	**0.73*** **	**0.62*** **	0.06	-0.06	0.11***
F3	**0.65*** **	**0.55*** **	-0.01	0.07	0.23***
F4	**0.75*** **	**0.45*** **	-0.08	-0.01	0.25***
I1	**0.92*** **	-0.00	**0.10**	-0.05	0.15
I2	**0.87*** **	-0.06	**0.18**	-0.01	0.21*
I3	**0.72*** **	0.05	**0.29**	0.06	0.37***
I4	**0.69** **	0.00	**0.74** **	0.00	-0.02
IN1	**0.60*** **	-0.06	-0.01	**0.68*** **	0.23***
IN2	**0.59*** **	0.05	0.08	**0.55*** **	0.27***
IN3	**0.62*** **	-0.03	0.02	**0.65*** **	0.22***
IN4	**0.58*** **	0.07	-0.06	**0.58*** **	0.31***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$

Table 29. Standardized factor loadings of bi-factor ESEM model for Study 3.

Item	General	Frequency	Intensity	Intentionality	Residuals
F1	**0.73*** **	**0.50*** **	-0.20	0.05	0.20***
F2	**0.74*** **	**0.60*** **	-0.01	0.01	0.09***
F3	**0.78*** **	**0.51*** **	-0.03	-0.02	0.15***
F4	**0.74*** **	**0.45*** **	0.07	-0.03	0.24***
I1	**0.86*** **	0.07**	**0.22**	-0.02	0.20***
I2	**0.84*** **	-0.04	**0.50***	0.01	0.05
I3	**0.86*** **	0.03	**0.12**	-0.01	0.24***
I4	**0.90*** **	-0.07**	**-0.06**	0.01	0.19**
IN1	**0.70*** **	0.02	-0.05	**0.49*** **	0.25***
IN2	**0.66*** **	0.01	-0.01	**0.58*** **	0.22***
IN3	**0.68*** **	-0.04	0.04	**0.64*** **	0.15***
IN4	**0.57*** **	0.01	0.01	**0.62*** **	0.29***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

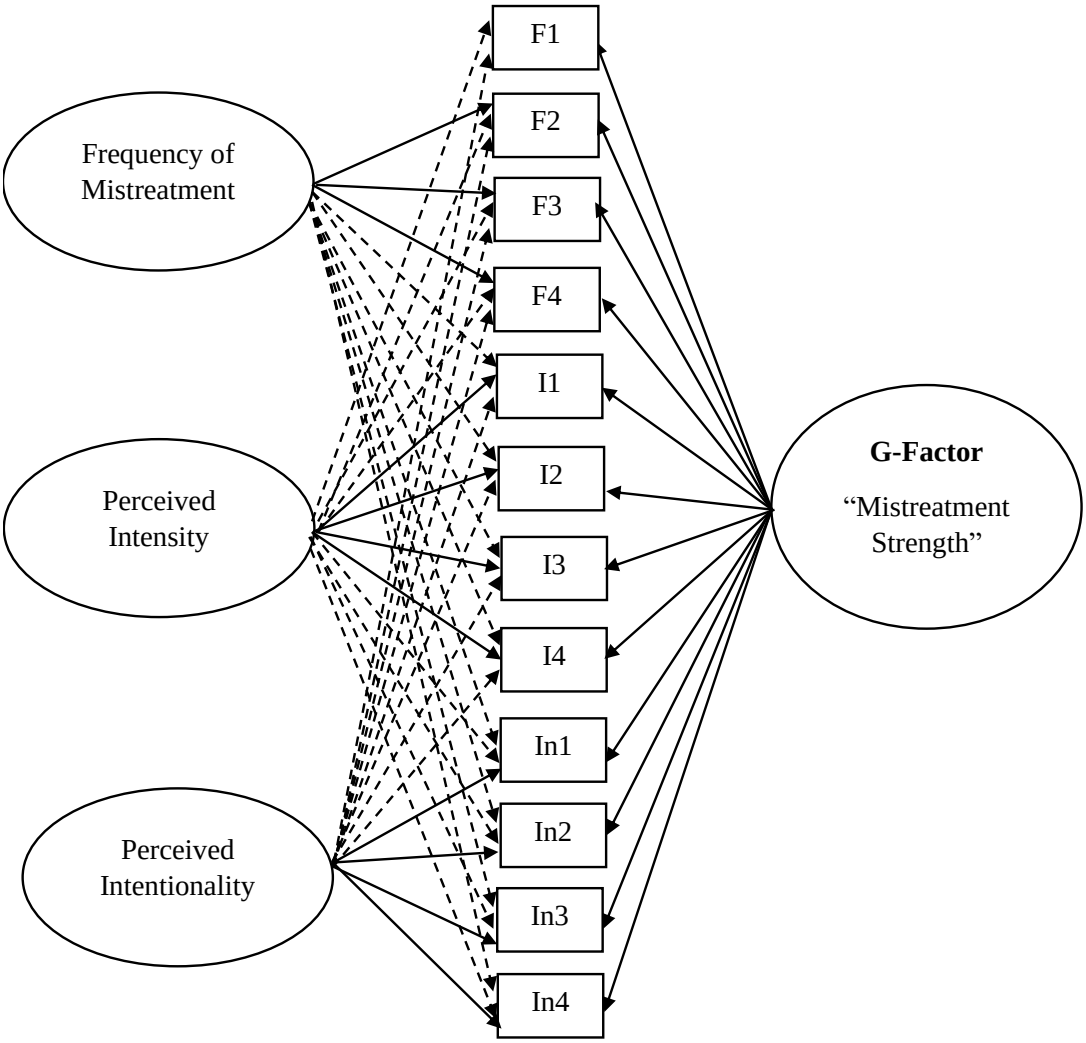

Figure 3a. Standard bi-factor ESEM model.

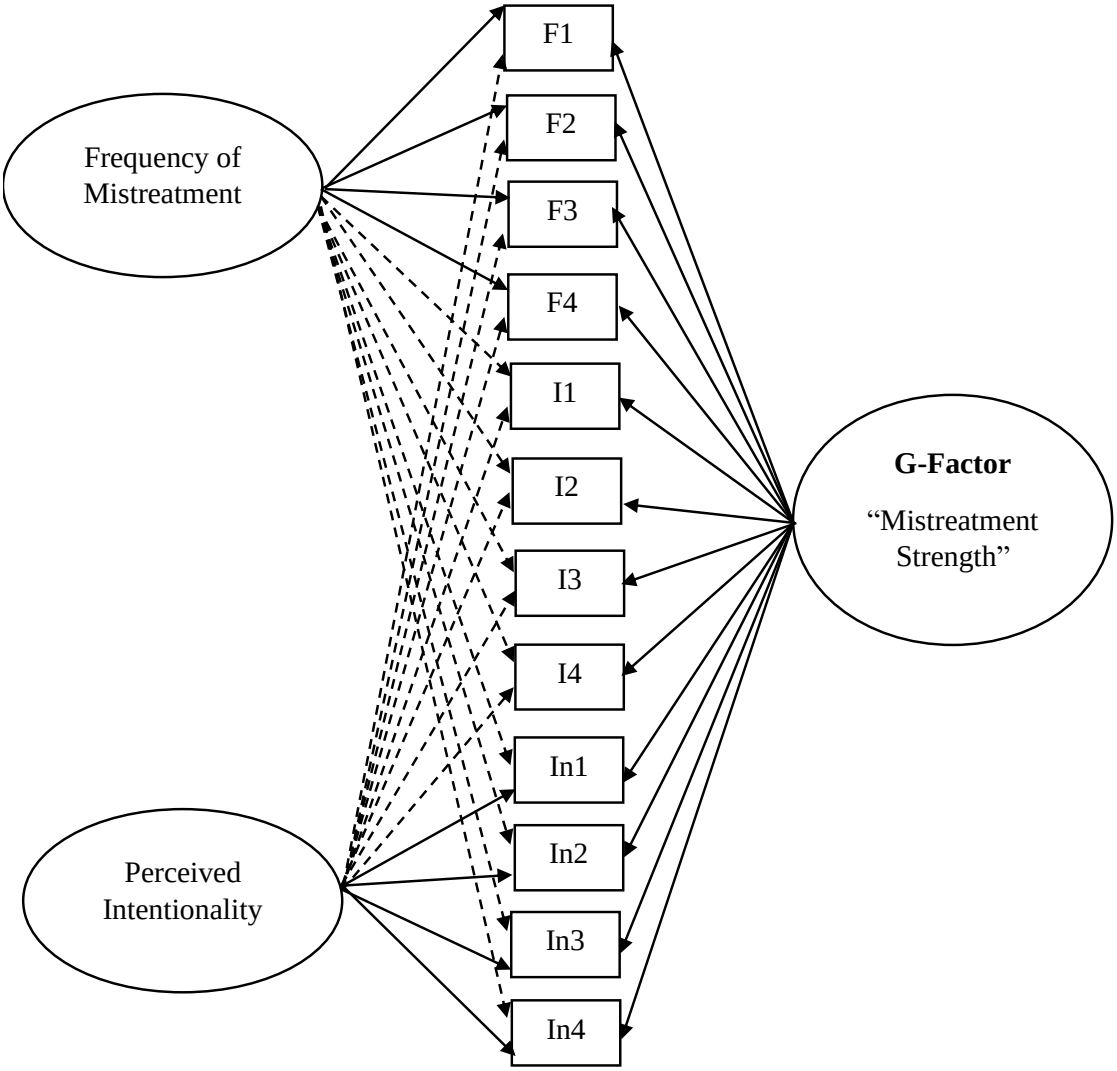

Figure 3b. Bi-factor S-1 ESEM model.

Table 30. Standardized factor loadings of bi-factor S-1 ESEM model for Study 1.

Item	General	Frequency	Intentionality	Residuals
F3	0.74***	**0.65*** **	-0.02	0.04*
F4	0.75***	**0.59*** **	-0.02	0.10***
F5	0.75***	**0.55*** **	0.04	0.12***
F6	0.74***	**0.55*** **	0.01	0.15***
I1	0.94***	-0.03	-0.06	0.12**
I2	0.92***	-0.03	-0.00	0.16***
I3	0.88***	0.08*	-0.01	0.22***
I4	0.89***	-0.02	0.07*	0.21***
IN1	0.69***	0.00	**0.57*** **	0.20***
IN4	0.66***	0.03	**0.60*** **	0.20***
IN8	0.69***	-0.01	**0.61*** **	0.15***
IN9	0.60***	-0.01	**0.63*** **	0.25***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Table 31. Standardized factor loadings of bi-factor S-1 ESEM model for Study 2.

Item	General	Frequency	Intentionality	Residuals
F1	0.71***	**0.54***	0.03	0.18***
F2	0.76***	**0.58***	-0.04	0.11***
F3	0.68***	**0.52***	0.07	0.23***
F4	0.74***	**0.44***	-0.04	0.28***
I1	0.89***	0.04	-0.10*	0.20***
I2	0.90***	-0.07	-0.07	0.17**
I3	0.79***	0.02	0.06	0.37***
I4	0.82***	-0.03	0.12*	0.32***
IN1	0.66***	-0.05	**0.59***	0.24***
IN2	0.67***	0.05	**0.51***	0.27***
IN3	0.68***	-0.03	**0.58***	0.22***
IN4	0.63***	0.08	**0.50***	0.32***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Table 32. Standardized factor loadings of bi-factor S-1 ESEM model for Study 3.

Item	General	Frequency	Intentionality	Residuals
F1	**0.71*** **	**0.52*** **	0.05**	0.20***
F2	**0.73*** **	**0.62*** **	-0.00	0.09***
F3	**0.76*** **	**0.53*** **	-0.01	0.15***
F4	**0.76*** **	**0.45*** **	-0.05*	0.24***
I1	**0.91*** **	0.04	-0.04*	0.18***
I2	**0.91*** **	-0.08**	-0.10***	0.16***
I3	**0.87*** **	0.04	0.03	0.25***
I4	**0.84*** **	-0.01	0.14***	0.28**
IN1	**0.64*** **	0.04	**0.57*** **	0.25***
IN2	**0.62*** **	0.01	**0.62*** **	0.22***
IN3	**0.64*** **	-0.05*	**0.67*** **	0.16***
IN4	**0.53*** **	0.01	**0.65*** **	0.29***

Note. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Nomological network of FOM. To flag any potential concerns, we first assessed the mean, kurtosis and skewness of the study variables (see Table 33). Unlike studies 1 and 2, intensity yielded a skewness statistic of 1.30, indicating that participants favoured the lower end of the Likert scale when responding to these items.

Table 33. Scale descriptives among Study 3 variables.

	M	*SE*	*SD*	Skewness (*SE*)	Kurtosis (*SE*)
Frequency	2.08	.04	1.02	0.78 (.09)	-0.25 (.18)
Intensity	1.73	.03	0.90	1.30 (.09)	1.09 (.18)
Perceived Intentionality	2.37	.04	1.19	0.34 (.09)	-1.22 (.18)
Perpetrator Power	2.31	.05	1.27	0.59 (.09)	-0.99 (.18)
Singled-Out Mistreatment	2.31	.04	0.99	0.53 (.09)	-0.54 (.18)
Civility Climate	3.60	.03	0.84	-0.52 (.09)	-0.01 (.18)
Affective Commitment	2.88	.04	1.05	0.03 (.09)	-0.88 (.18)
Turnover Intentions	3.05	.03	0.86	0.12 (.09)	-0.58 (.18)
Retaliation	2.41	.02	0.51	0.24 (.09)	0.19 (.18)
Agentic Management	2.84	.02	0.67	0.17 (.09)	-0.20 (.18)
Communal Management	2.62	.04	0.98	0.24 (.11)	-0.77 (.18)

Note. $N = 779$.

We assessed correlations among all study variables (see Tables 34 and 35) in Mplus using the three-factor ESEM scores of frequency, intensity, and perceived intentionality. We then re-assessed all study correlations using the bi-factor S-1 ESEM model to assess correlations with the mistreatment strength, frequency, and perceived intentionality.

Consistent with studies 1 and 2, the features of mistreatment were strongly correlated with one another (*r*s = .65 to .79) and yielded strong positive relationships with perpetrator power (*r*s = .60 to .70) and singled-out mistreatment (*r*s = .56 to .65) and strong negative relationships with civility climate (*r*s = -.46 to -.57). Of the three features of mistreatment, frequency yielded the strongest negative correlation with affective commitment (*r* = -.37) and the strongest positive correlation with turnover intentions (*r* = .48). Perceived intentionality was most strongly correlated with retaliation (*r* = .21). In contrast, intensity yielded the weakest relationships with outcomes of the three features (r_{AC} = -.28, r_{TI} = .36, r_{Ret} = .13). We also found that civility climate yielded the strongest relationships with outcomes (r_{AC} = .61, r_{TI} = -.66, r_{Ret} = -.11) compared to perpetrator power and singled-out mistreatment, a consistent finding with studies 1 and 2.

In terms of the bi-factor S-1 ESEM correlations, the G-factor "mistreatment strength" yielded a negative small-to-moderate negative correlation with affective commitment (*r* = -.27), a moderate positive correlation with turnover intentions (*r* = .35), and a small positive correlation with retaliation (*r* = .12). After the shared variance attributable between all three features of mistreatment was accounted for with the G-factor, frequency and intensity yielded a moderate positive correlation (*r* = .30). Further, frequency and perceived intentionality yielded small-to-moderate correlations with affective commitment (*r*s = -.27 and -.25) and turnover intentions (*r*s

= .33 and .26). Although frequency was not significantly related to retaliation, perceived intentionality and retaliation yielded a small correlation (r = .18).

Moreover, the G-factor "mistreatment strength" and S-factors frequency and perceived intentionality yielded moderate to strong correlations with perpetrator power, singled-out mistreatment, and civility climate (rs = -.41 to .55). Although mistreatment strength and frequency were not significantly related to either agentic or communal impression management, we did find a small negative correlation between perceived intentionality and communal impression management (r = -.13).

Table 34. Standardized correlations of all Study 3 variables from three-factor ESEM.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Frequency	.95										
2. Intensity	.79***	.95									
3. Perceived Intentionality	.70***	.65***	.93								
4. Perpetrator Power	.70***	.60***	.68***	.96							
5. Singled-Out Mistreatment	.65***	.56***	.60***	.63***	.93						
6. Civility Climate	-.57***	-.46***	-.51***	-.62***	-.63***	.80					
7. Affective Commitment	-.37***	-.28***	-.36***	-.40***	-.47***	.61***	.89				
8. Turnover Intentions	.48***	.36***	.46***	.49***	.53***	-.66***	-.81***	.87			
9. Retaliation	.16**	.13**	.21***	.10*	.08	-.11*	-.01	.06	.80		
10. Agentic Management	.11*	.09*	.08	.07	.06	.05	.15**	-.14**	.10	.69	
11. Communal Management	-.04	.00	-.12**	-.11*	-.01	.08	.06	-.11*	-.33***	.34***	.73

Note. $N = 779$. Numbers on the diagonal represent internal consistency of scales. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Table 35. Standardized correlations of all Study 3 variables from bi-factor S-1 ESEM.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Mistreatment Strength	-										
2. Frequency	.00	.95									
3. Perceived Intentionality	.00	.30***	.93								
4. Perpetrator Power	.53***	.35***	.31***	.96							
5. Singled-Out Mistreatment	.49***	.32***	.26***	.54***	.93						
6. Civility Climate	-.41***	-.35***	-.26***	-.59***	-.57***	.80					
7. Affective Commitment	-.27***	-.27***	-.25***	-.40***	-.45***	.62***	.89				
8. Turnover Intentions	.35***	.33***	.26***	.47***	.50***	-.67***	-.81***	.87			
9. Retaliation	.12*	.10	.18**	.07	.05	-.10	.00	.07	.80		
10. Agentic Management	.02	.00	-.02	.02	-.01	.07	.17**	-.17**	.10	.69	
11. Communal Management	.02	-.05	-.13*	-.10	.04	-.01	.02	-.08	-.32***	.32**	.73

Note. $N = 779$. Numbers on the diagonal represent internal consistency of scales. *** indicates $p < .001$; ** indicates $p < .01$; * indicates $p < .05$.

Examination of profile solution. We conducted the LPA in Mplus (Muthén & Muthén, 1998-2019) using standardized factor scores obtained in the previous step. To select the appropriate number of profiles that best represents the data, we considered: a) statistical indicators of model fit, b) percentages of respondents across the various profiles, and c) alignment with workplace mistreatment theory. To assess statistical indicators of model fit, we looked at Akaïke Information Criterion (AIC), Bayesian Information Criterion (BIC), and Sample-Size Adjusted BIC (SABIC) values. Lower values of AIC, BIC, and SABIC generally indicate better model fit compared to higher values. Further, we looked to profile size, as profiles with 5% of respondents or less can indicate spurious results and should be considered with caution (Nylund et al., 2007).

We first analyzed the fit indices and profile structure for two- to 10-profile solutions using standardized factor scores for the three-factor ESEM (see Table 36) to ensure that the data could not be analyzed with these factor scores. As expected, these models did not yield important qualitative (i.e., shape) differences among profiles, likely because the factors were highly correlated (*r*s = .65 to .79). Figure 4 shows a typical profile that emerged across all the profile solutions (except for Profile 1).

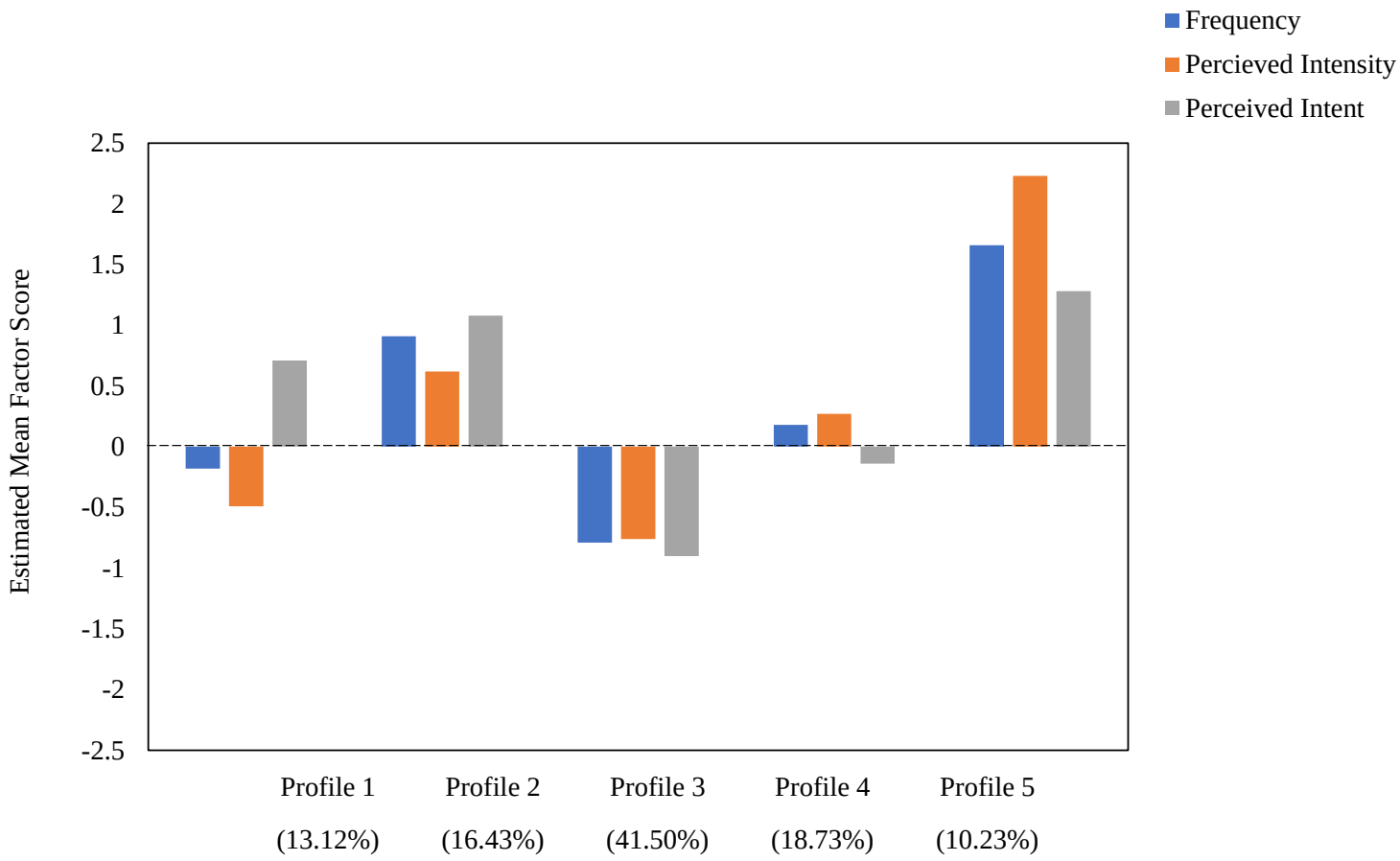

Figure 4. Means of the FOM scales of the five-profile solution using three-factor ESEM scores.

Table 36. LPA fit information using three-factor ESEM solution.

				Percentage of Respondents in Each Profile								
Profiles	AIC	BIC	SABIC	1	2	3	4	5	6	7	8	9	10
2	5296.70	5343.11	5311.35	72.07%	27.93%								
3	4778.49	4843.46	4799.01	50.69%	37.82%	11.49%							
4	4538.58	4622.12	4564.96	32.80%	9.54%	42.88%	14.78%						
5	4376.93	4479.04	4409.18	13.12%	16.43%	41.50%	18.73%	10.23%					
6	4133.01	4253.68	4171.12	23.47%	15.13%	9.35%	41.22%	7.57%	3.27%				
7	4019.01	4159.14	4063.87	41.57%	23.61%	3.46%	15.31%	8.55%	6.31%	1.20%			
8	3918.08	4075.88	3967.92	19.19%	2.80%	2.23%	4.86%	20.61%	9.88%	34.30%	6.13%		
9	3814.81	3991.18	3870.51	20.43%	9.81%	4.88%	2.67%	19.28%	4.85%	2.51%	3.42%	1.43%	
10	3710.04	3904.97	3771.60	33.83%	4.88%	5.00%	4.38%	1.44%	18.65%	2.49%	2.41%	19.19%	7.75%

Note. AIC = Akaïke information criterion; BIC = Bayesian information criterion; SABIC = Sample-size adjusted BIC.

Next, we repeated this process using the standardized factor scores for the bi-factor S-1 model (see Table 37). The AIC, BIC, and SABIC values across all profile solutions are displayed in Figure 5. In general, we found that fit indices improved (i.e., the AIC, BIC, and SABIC values decreased) as more profiles were added, and that there was a noticeable improvement in model fit starting at the four-profile solution. However, the seven- to 10-profile solutions were problematic for two reasons. First, they yielded profiles with extremely small percentages of respondents, and second, some of the profiles were not qualitatively distinct from other profiles. Specifically, these solutions yielded overlapping profiles where the profile shape of one profile was not distinct from another. Consequently, we narrowed our scope to the four- to six-profile solutions.

Table 37. LPA fit information using Bi-Factor S-1 ESEM solution.

				Percentage of Respondents in Each Profile									
Profiles	AIC	BIC	SABIC	1	2	3	4	5	6	7	8	9	10
2	4115.43	4157.98	4126.24	54.86%	45.14%								
3	4105.02	4164.60	4120.16	53.82%	23.13%	23.06%							
4	**3913.96**	**3971.10**	**3913.96**	**43.10%**	**29.10%**	**8.70%**	**19.10%**						
5	3869.27	3962.90	3893.06	3.05%	41.35%	15.65%	10.57%	29.38%					
6	3861.51	3972.15	3889.62	4.66%	39.65%	18.96%	21.79%	6.29%	8.66%				
7	3806.17	3933.84	3838.61	39.58%	5.31%	1.90%	9.61%	24.78%	5.98%	12.84%			
8	3814.17	3958.86	3850.94	35.18%	4.40%	1.90%	9.61%	24.78%	12.84%	5.98%	5.31%		
9	3767.29	3929.01	3808.39	0.00%	5.40%	38.32%	13.89%	12.37%	14.39%	5.69%	1.80%	8.17%	
10	3728.99	3908.73	3775.41	1.35%	37.65%	5.54%	0.42%	11.65%	14.87%	13.85%	4.53%	2.02%	8.13%

Note. AIC = Akaïke information criterion; BIC = Bayesian information criterion; SABIC = Sample-size adjusted BIC. Boldface indicates final profile solution.

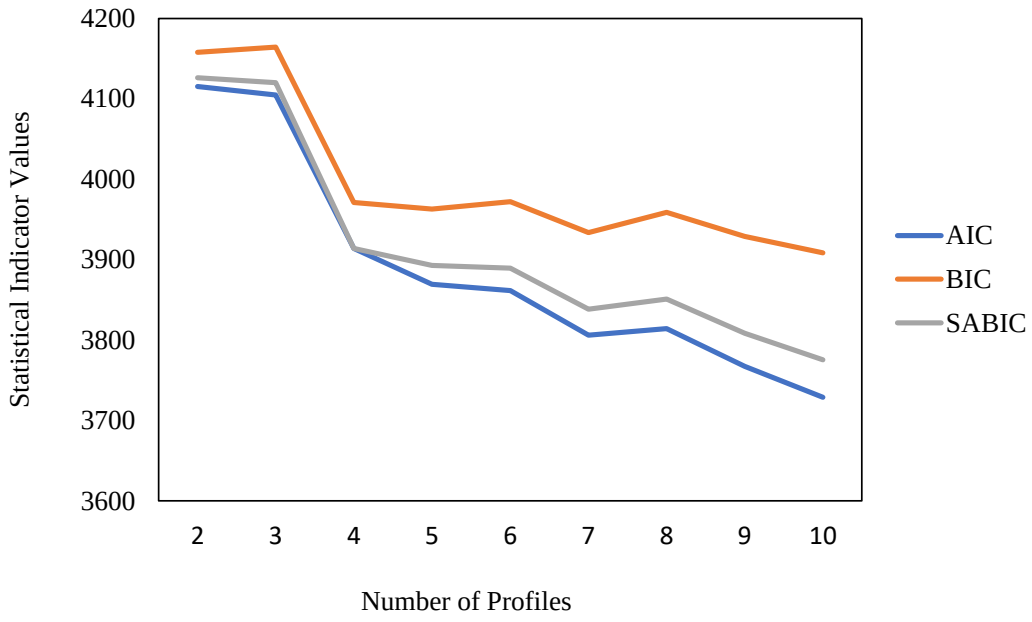

Figure 5. Statistical indicators for the two- to ten-profile solutions.

Note. AIC = Akaïke information criterion; BIC = Bayesian information criterion; SABIC = Sample-size adjusted BIC. (*N* = 779).

The statistical indicators did not differ drastically among the four-, five-, and six-profile solutions, and thus we looked toward profile size and compliance with workplace mistreatment theory as a guide for selecting the final profile solution. The four-profile solution illustrated in Figure 6 involved: (1) a profile marked by very high mistreatment strength, moderate-low frequency, and moderate to low intentionality (8.7%), (2) a profile marked by moderate-high mistreatment strength, moderate frequency, and moderate intentionality (19.10%), (3) a profile marked by moderate-low mistreatment strength, moderate-high frequency, and high intentionality (29.10%), and (4) a profile marked by moderate-low mistreatment strength, frequency, and intentionality (43.10%).

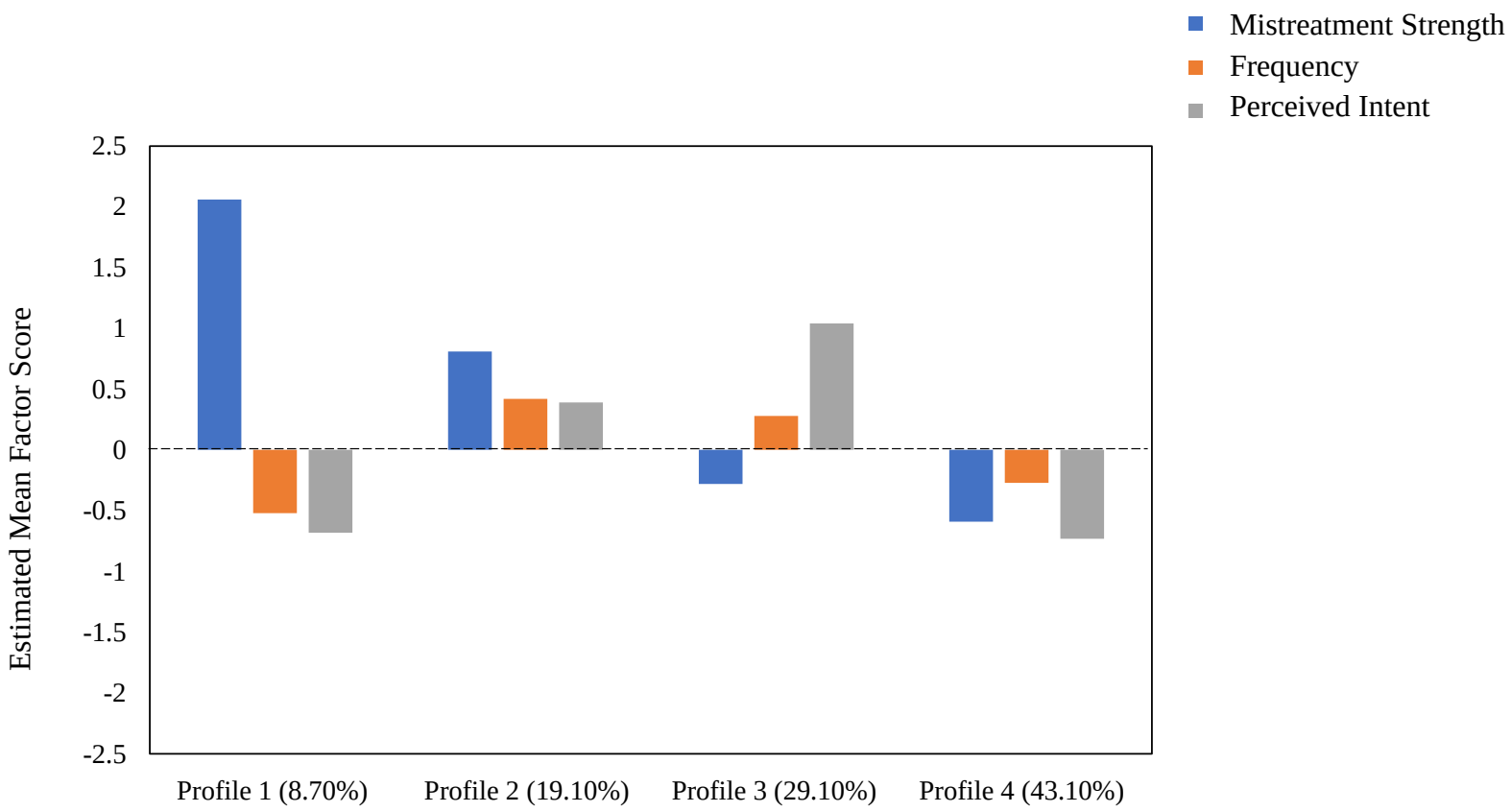

Figure 6. Means of the FOM scales of the four-profile solution.

As Figure 7 shows, the five-profile solution yields profiles that are consistent with the literature on workplace aggression. The first profile was marked by extremely high mistreatment strength, low frequency, and low intentionality (3.05%). It is important to note that Profile 1 was comprised of a very small proportion of respondents, which could indicate that this profile is spurious (Nylund et al., 2007). A second profile is marked by extremely high mistreatment strength, moderate frequency, and moderate intentionality (10.57%). Profile 3 is characterized by moderate levels of mistreatment strength, frequency, and intentionality (29.38%). The fourth profile is characterized by moderate mistreatment strength, moderate frequency, and high intentionality (15.65). Finally, the last profile is characterized by moderate-low mistreatment strength, moderate frequency, and moderate-low intentionality (41.35%).

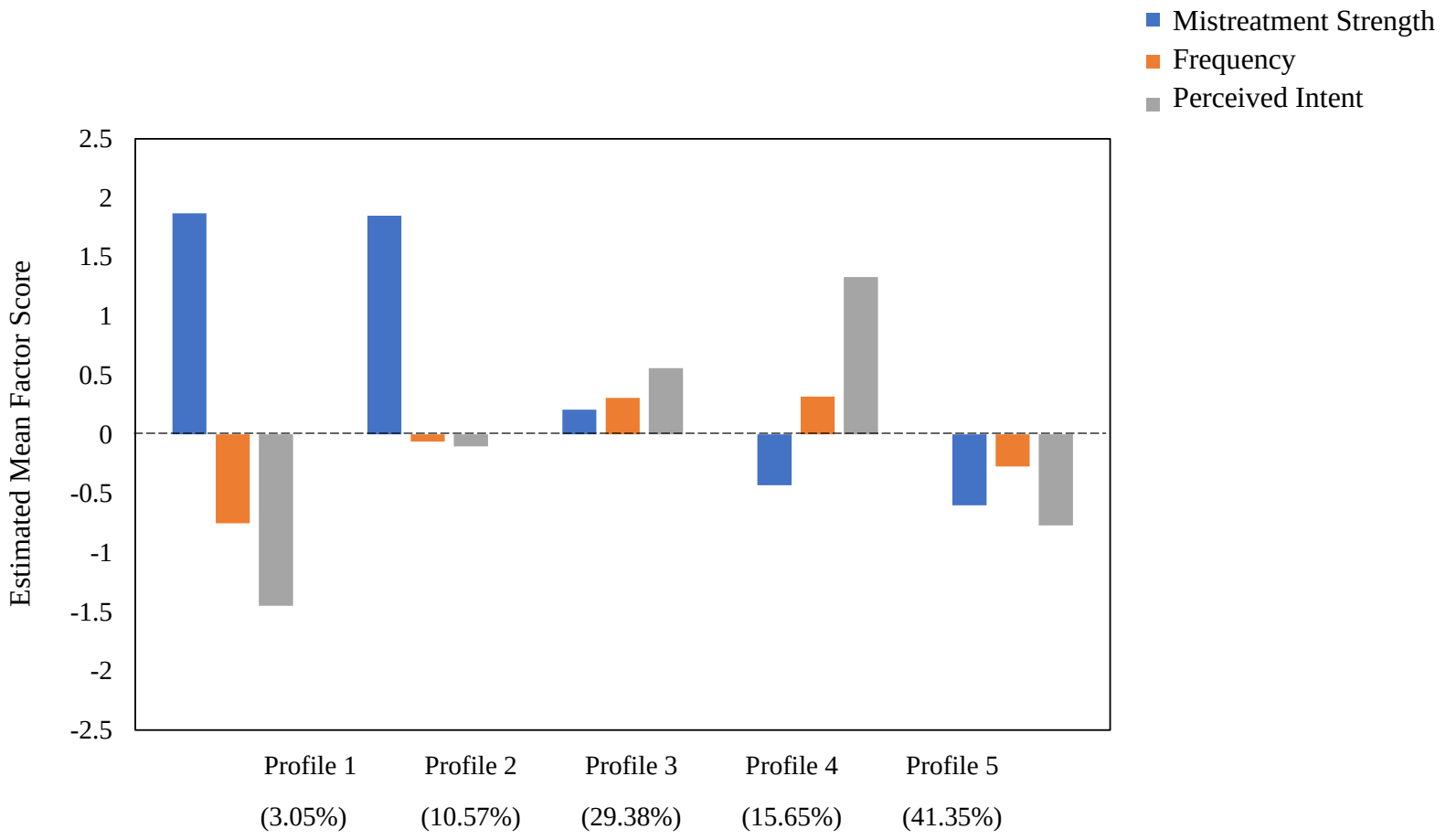

Figure 7. Means of the FOM scales of the five-profile solution.

The six-profile solution found in Figure 8 produced a similar profile structure to the five-profile solution. It introduced, however, a new profile marked by moderate mistreatment strength, extremely high frequency, and moderate intentionality that could be indicative of "frequent mistreatment". However, like the 5-profile solution, two of the profiles in the six-profile solution hovered around the 5% cutoff -- the profile labelled 'High Intensity/Low Frequency & Intent' (6.29%) and the new profile labelled 'Frequent Mistreatment' (4.66%). For this reason, we selected the four-profile solution for the final model because it had adequate model fit, each profile was larger than the 5% cutoff, and there were distinct combinations of the features of mistreatment across the four profiles (see Figure 9). We therefore supported H_1 and moved forward to next phase of our analyses.

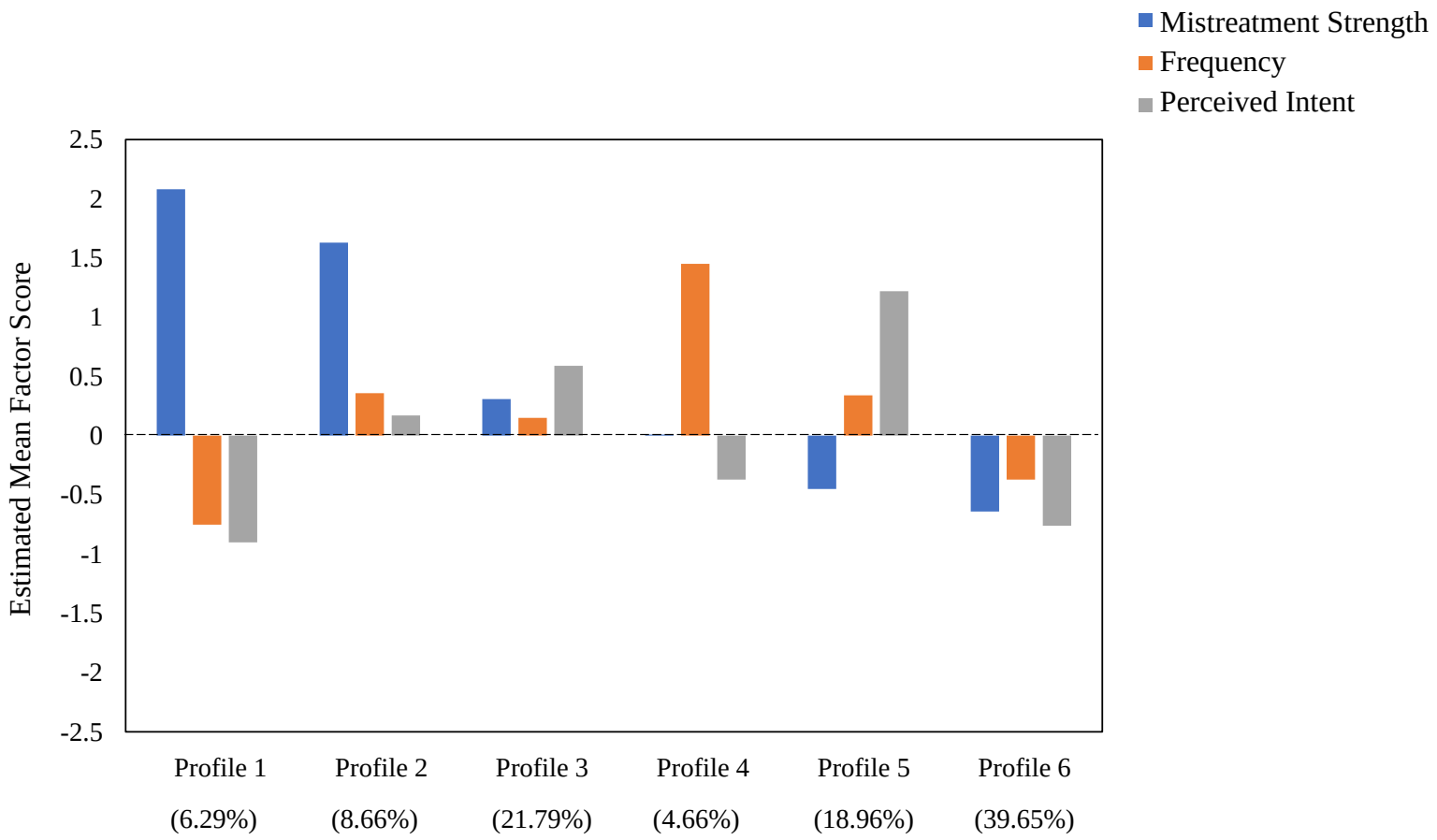

Figure 8. Means of the FOM scales of the six-profile solution.

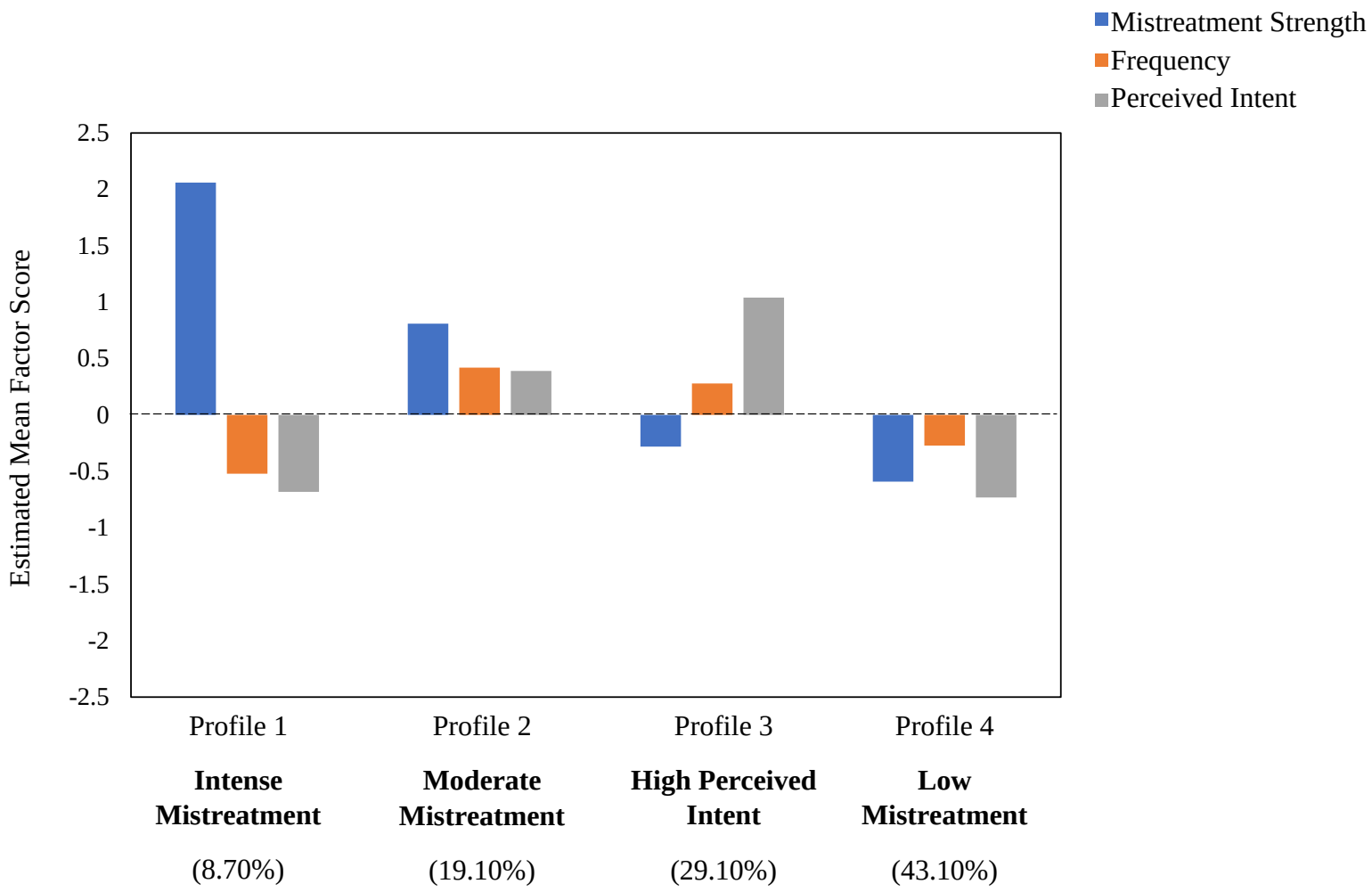

Figure 9. The final four-profile solution with profile labels.

Profile relationships with outcomes. Following the selection of the final LPA model, we then conducted auxiliary analyses in MPlus using standardized factor scores to examine how each profile related to important workplace outcomes.

Affective commitment. Recall in RQ_1, we intended to examine how various profiles of workplace mistreatment would uniquely relate to affective commitment. Results indicated that reports of affective commitment were significantly higher in Profile 4 (Low Mistreatment, M = 0.45) compared to all other profiles. Interestingly, reports of affective commitment did not significantly differ between profiles 1 (Intense Mistreatment, M = -0.37), 2 (Moderate Mistreatment, M = -0.50), or 3 (High Perceived Intent (M = -0.22), suggesting that these profiles all fared similarly regardless of their distinctions between the three features of mistreatment.

Turnover intentions. To address RQ_2, we examined the profile comparisons regarding turnover intentions. Reports of turnover intentions followed the same general pattern as affective commitment; Profile 4 (Low Mistreatment, M = -0.45) yielded significantly lower turnover intentions scores compared to all other profiles. However, we did find one significant comparison between Profile 2 (Moderate Mistreatment, M = 0.53) and Profile 3 (High Perceived Intent, M = 0.18), indicating that members in the Moderate Mistreatment profile reported higher turnover intentions than did members of the High Perceived Intent profile. We did not find any significantly comparisons with Profile 1 (Intense Mistreatment, M = 0.11) apart from Profile 4.

Retaliation. RQ_3 involved addressing the unique profile relationships to reports of retaliation. Consistent with our other outcome measures, members in Profile 4 (Low Mistreatment, M = -0.25) yielded significantly lower retaliation scores than did all other profiles. None of the profile comparisons between profiles 1 (Intense Mistreatment, M = 0.11), 2 (Moderate Mistreatment, M = 0.24), or 3 (High Perceived Intent (M = 0.18), suggesting that

members of these profiles reported similar levels of retaliation regardless of their unique scores on the profile indicators.

All profile comparisons are displayed in Table 38, and a graph of the standardized means of affective commitment, turnover intentions, and retaliation among profiles is found in Figure 10.

Table 38. Pairwise comparisons for affective commitment, turnover intentions, and retaliation among profiles.

	Wald's Values for Pairwise Comparisons Among Profiles						
Outcome	Overall	1 vs. 2	1 vs. 3	1 vs. 4	2 vs. 3	2 vs. 4	3 vs. 4
AC	71.71***	0.29	0.58	17.46***	2.67	41.12***	34.39***
TI	105.65***	0.03	3.06	28.80***	5.63*	59.08***	44.86***
Ret.	39.17***	0.58	0.26	7.67**	0.15	17.56***	21.12***

Note. Profile 1 = Intense Mistreatment (M_{AC} = -0.37, M_{TI} = 0.49, M_R = 0.11), Profile 2 = Moderate Mistreatment (M_{AC} = -0.50, M_{TI} = 0.53, M_R = 0.24), Profile 3 = High Perceived Intent (M_{AC} = -0.22, M_{TI} = 0.18, M_R = 0.18), Profile 4 = Low Mistreatment (M_{AC} = 0.45, M_{TI} = -0.45, M_R = -0.25).

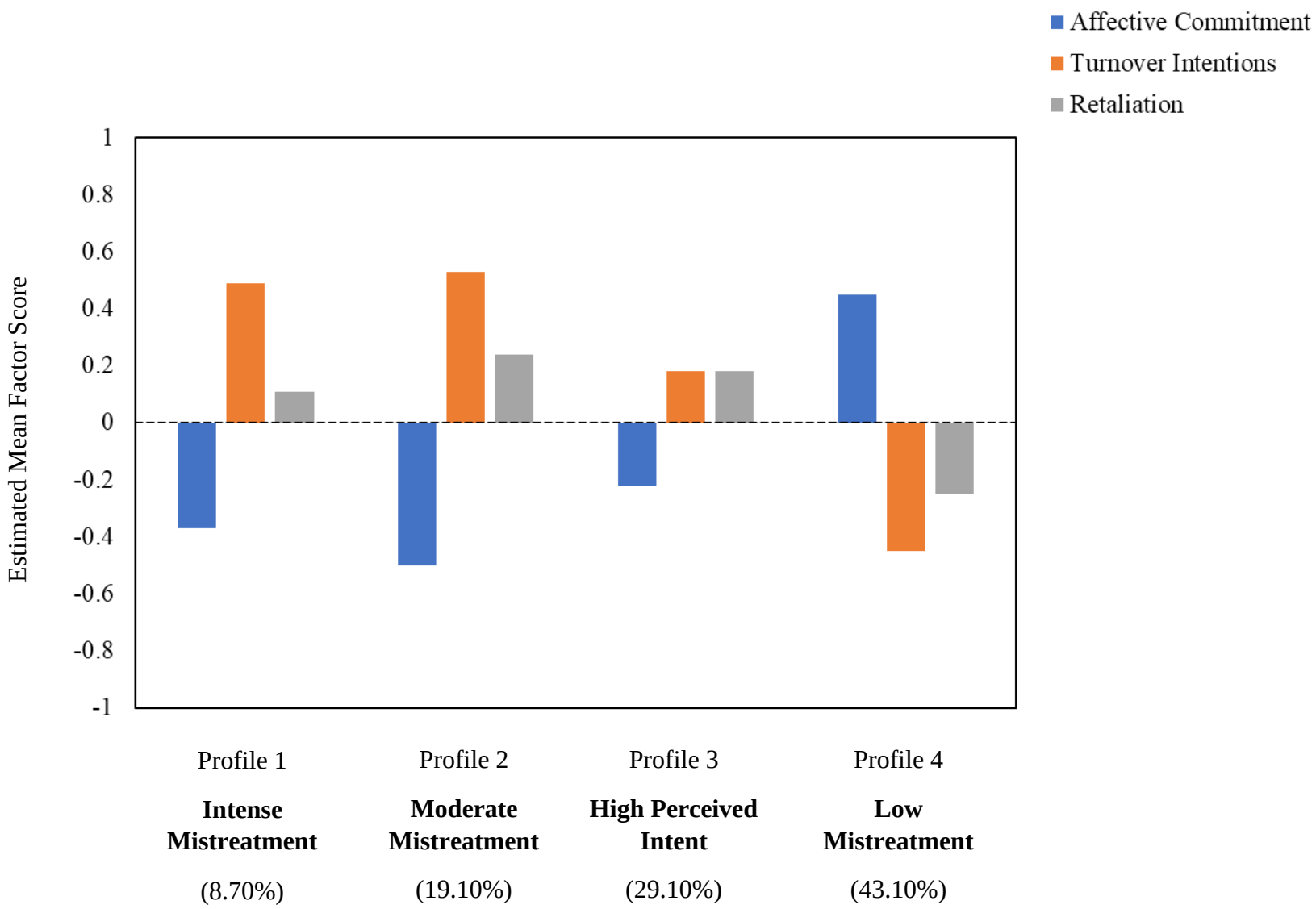

Figure 10. Means of affective commitment, turnover intentions, and retaliation across the four profiles.

Profile relationships to environmental factors. In addition to assessing profile relationships with important workplace outcomes, we were interested in exploring profile relationships with three environmental factors related to mistreatment: perpetrator power, singled-out mistreatment experiences, and civility climate.

Perpetrator power. We conducted our supplementary analyses in MPlus using standardized factor scores to examine how each profile related to perpetrator power, singled-out mistreatment, and civility climate. Regarding RQ_4, we found that reports of perpetrator power were significantly lower in Profile 4 (Low Mistreatment, M = -0.79) compared to all other profiles. Further, profiles 1 (Intense Mistreatment, M = 1.02) and 2 (Moderate Mistreatment, M = 1.09) reported significantly higher perpetrator power scores than did members in Profile 3 (High Perceived Intent, M = 0.15). There was not a significant difference in perpetrator power scores between profiles 1 and 2.

Singled-out mistreatment. We then examined profile relationships with singled-out mistreatment to address RQ_5. Consistent with perpetrator power, individuals in Profile 4 (Low Mistreatment, M = -0.43) reported significantly lower singled-out mistreatment scores compared to all other profiles. We also once again found that members of profiles 1 (Intense Mistreatment, M = 0.57) and 2 (Moderate Mistreatment, M = 0.68) reported significantly higher singled-out mistreatment scores than Profile 3 (High Perceived Intent, M = 0.02), but did not significantly differ from each other.

Civility climate. Finally, we examined profile relationships with civility climate to explore RQ_6. The pairwise comparisons for civility climate mirror perpetrator power and singled-out mistreatment but in the opposite direction: members of Profile 4 (Low Mistreatment, M = 0.22) reported significantly higher scores on civility climate than did members of all other

profiles. Further, profiles 1 (Intense Mistreatment, *M* = -0.23) and 2 (Moderate Mistreatment, *M* = -0.34) reported significantly lower scores on civility climate compared to members in Profile 3 (High Perceived Intent, *M* = -0.03); however, there was not a significant difference between civility climate scores for profiles 1 and 2.

Profile comparisons for perpetrator power, singled-out mistreatment, and civility climate are displayed in Table 39, and a graph of the standardized means of perpetrator power, singled-out mistreatment, and civility climate among profiles is found in Figure 11.

Table 39. Pairwise comparisons for perpetrator power, singled-out mistreatment, and civility climate among profiles.

	Wald's Values for Pairwise Comparisons Among Profiles						
Outcome	Overall	1 vs. 2	1 vs. 3	1 vs. 4	2 vs. 3	2 vs. 4	3 vs. 4
Perpetrator Power	253.81***	0.90	15.87***	77.89***	26.50***	163.54***	57.81***
Singled-Out Mistreatment	180.85***	0.42	14.64***	54.09***	28.22***	117.89***	33.09***
Civility Climate	148.52***	1.31	5.62*	29.43***	22.48***	99.01***	38.15***

Note. Profile 1 = Intense Mistreatment (M_{PP} = 1.02, M_{SOM} = 0.57, M_{CC} = -0.23), Profile 2 = Moderate Mistreatment (M_{PP} = 1.09, M_{SOM} = 0.68, M_{CC} = -0.34), Profile 3 = High Perceived Intent (M_{PP} = 0.15, M_{SOM} = 0.02, M_{CC} = -0.03), Profile 4 = Low Mistreatment (M_{PP} = -0.79 , M_{SOM} = -0.43, M_{CC} = 0.22).

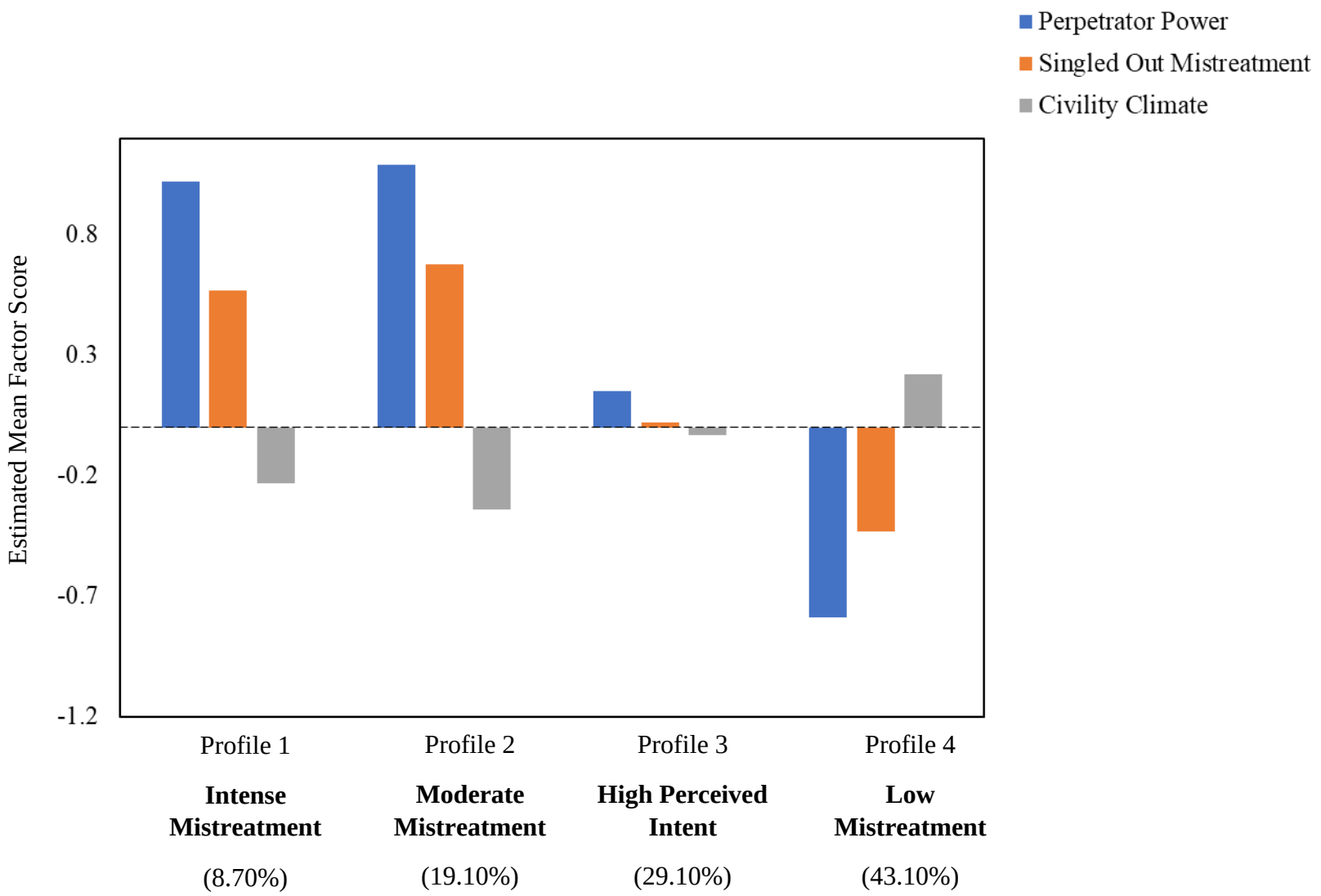

Figure 11. Means of perpetrator power, singled-out mistreatment, and civility climate across the four profiles.

4.4 Study 3 Discussion

The aim of Study 3 was to bring organization to the workplace mistreatment literature by using person-centred research methodology. Specifically, we investigated how the three features of mistreatment (i.e., general mistreatment strength, frequency, and perceived intentionality) combine to create different profiles of workplace mistreatment using LPA. We found support for four profiles of workplace mistreatment:

- a profile marked by extremely high mistreatment strength and low frequency and intent,
- a profile marked by high mistreatment strength, and moderate frequency and intent,
- a profile marked by moderate mistreatment strength and frequency and high intent, and
- a profile marked by low mistreatment strength, moderate frequency, and low intent.

Unsurprisingly, members of Profile 4 (Low Mistreatment) reported significantly higher affective commitment and significantly lower turnover intentions and retaliation compared to all other profiles. What was surprising, however, is that very few profile comparisons between profiles 1 (Intense Mistreatment), 2 (Moderate Mistreatment), or 3 (High Perceived Intent) were significant in terms of their relationships with organizational outcomes apart from Profile 2 members reporting significantly higher turnover intentions than Profile 3 members. This suggests that members in these profiles all fared similarly in terms of affective commitment and retaliation scores regardless of the profile distinctions regarding specific levels of mistreatment strength, frequency, and intentionality. This is a noteworthy finding, as these profiles are considerably different, particularly regarding their scores on the G-factor mistreatment strength. Recall that the G-factor is conceptually indistinguishable from intensity, and represents the shared variance among frequency, intensity, and perceived intentionality items. Accordingly, the G-factor can be thought of as a measure of general mistreatment strength. Profile 1 is marked by

an extremely high score mistreatment strength, and low scores of frequency and perceived intent; Profile 2 is marked by high mistreatment strength and moderate frequency and perceived intentionality; and Profile 3 is marked by moderate (but lower than average) mistreatment strength, moderate frequency, and high perceived intent. These findings suggest that a high score on just one feature of mistreatment can result in poorer outcomes for targets, regardless of which feature of mistreatment is heightened.

We examined profile relationships with environmental factors related to mistreatment (i.e., perpetrator power, singled-out mistreatment, and civility climate), and these relationships reflected more differences among profiles than did our outcomes. Members of Profile 4 (Low Mistreatment) had the lowest scores on perpetrator power and singled-out mistreatment and the highest scores on civility climate. However, individuals in Profile 3 (High Perceived Intent) reported lower levels of perpetrator power and singled-out mistreatment and higher levels of civility climate than did individuals in profiles 1 (Intense Mistreatment) and 2 (Moderate Mistreatment). Recall that profile 3 (High Perceived Intent) is marked by moderate-to-low mistreatment strength, moderate frequency, and high intent; whereas profile 1 is marked by extremely high mistreatment strength and low frequency/perceived intent, and profile 2 is marked by high mistreatment strength and moderate frequency and perceive intent. Thus, even though we found that profiles with a high score on either general mistreatment strength or perceived intentionality similarly predicted scores on affective commitment and retaliation, this was not the case for environmental factors. Specifically, we found that high scores on general mistreatment strength was more strongly related to environmental factors than were high scores on perceived intentionality.

Taken together, these findings align with previous research by Nixon et al. (2021) who found that individuals experiencing lower-level forms of mistreatment (i.e., individuals who reported lower intensity and intentionality) fared better on outcomes such as affective commitment and turnover intentions compared to individuals experiencing more severe forms of mistreatment (i.e., individuals who reported higher intensity and intentionality). However, we extend Nixon et al.'s research by using a feature-based approach to measuring mistreatment, including a measure of frequency that does not contain specific behaviours of mistreatment. Further, unlike Nixon and colleagues, we report frequency in our profiles of mistreatment, as our literature review highlighted frequency as an important key feature of mistreatment in addition to intensity and perceived intentionality. Due to the inclusion of frequency, we argue that the profiles found in this study are a more accurate representation of various experiences of workplace mistreatment.

Limitations and future directions. Despite promising results, the study is not without limitations. First, we utilized a single, online convenience sample of working employees across a variety of industries. Online convenience samples are widely accepted in organizational research, as 90.7% of articles in the *Journal of Applied Psychology* utilized convenience sampling from 2017-2021, with online platforms being the most common method (Zickar & Keith, 2023). However, online convenience samples can be vulnerable to careless responding and bots. To mitigate against this, we utilized attention check items to ensure that participants were attentive when answering survey items and analyzed response time/patterns to check for potential bots. Moreover, the use of a single time-point for data collection was appropriate for our study design as we did not intend to establish the temporal stability of profiles in this research. Instead, our focus was on examining the initial profile types of workplace mistreatment and their correlates.

Future research can expand on our findings by establishing the temporal stability of profiles using Latent Transition Analysis (LTA). LTA can indicate the variability of profile membership over time, and thus this approach can illustrate how often (and under what circumstances) individuals move from a low-level mistreatment profile to a more extreme form of mistreatment (or vice versa).

Further, we focused our attention on examining how the profiles relate to important work outcomes and environmental factors but did not look for important antecedents of profile membership. Future research should be conducted to assess predictors of profiles of workplace mistreatment such as personality traits and job characteristics. For example, previous research suggests that greater job control buffers the effect of experienced workplace mistreatment on instigated workplace mistreatment (Park & Martinez, 2022), and thus this may be an important predictor of profile membership.

In this study, we have examined the relationship between the profiles generated by LPA and a number of important outcomes of mistreatment, but there is more work to be done. The workplace mistreatment literature is replete with an array of antecedents and outcomes; including general well-being, stress, counterproductive workplace behaviours, organizational citizenship behaviours, work performance, job satisfaction, organizational justice. We now have a template where we can extend the study of mistreatment by looking at these variables with respect to our profiles. This research, in combination with Nixon et al. (2021)'s findings, pave the way for exciting future research that disentangles the workplace mistreatment literature to provide a more nuanced understanding of workplace mistreatment.

Chapter 5

5. General Discussion

In the present research, we answered recent calls made by Hershcovis (2011) and Nixon and colleagues (2021) to bring organization to the measurement of workplace mistreatment. Following an extensive literature review, we noted that the dominant measures of workplace mistreatment used a behaviour-based approach. Although most of the established mistreatment scales ask respondents about their experiences with a series of specific mistreatment behaviours, there is no agreement about which mistreatment behaviours reflect which mistreatment constructs. Accordingly, measures for low-level forms if mistreatment (i.e., incivility) share similar content with items for more extreme forms of mistreatment (i.e., bullying; abusive supervision), resulting in major measurement overlap of seemingly different experiences of mistreatment (Hershcovis, 2011). In an attempt to address concerns regarding measurement in the field of workplace mistreatment, we created a new measure of mistreatment strength using a feature-based approach. We specifically created the FOM with subscales measuring frequency, intensity, and perceived intent.

In Study 1, we assessed the psychometric properties of the FOM and explored the nomological network of frequency, intensity, and perceived intentionality. We found that the FOM yielded excellent psychometric properties, and related similarly to correlates as did dominant measures of workplace mistreatment.

We then used this measure to test a new model of workplace mistreatment and expand our knowledge of the mistreatment process. In Study 2, we found that mistreatment strength, as measured by frequency, intensity, and perceived intentionality, was negatively related to affective commitment and positively related to turnover intentions. We further found that these

relationships were mediated by target reports of negative affective reactions following their mistreatment. This finding aligns with AET, which posits that negative work events result in a negative emotional appraisal process that can lead to adverse outcomes for individuals (Weiss & Cropanzano, 1996).

In Study 3, we examined how general mistreatment strength, frequency, and intensity could combine to create different profiles of workplace mistreatment. We found support for four profiles of workplace mistreatment, including a profile marked by extremely high mistreatment strength and low frequency and intent (Intense Mistreatment), a profile marked by high mistreatment strength, and moderate frequency and intent (Moderate Mistreatment), a profile marked by moderate mistreatment strength and frequency and high intent (High Perceived Intent), and a profile marked by low mistreatment strength, moderate frequency, and low intent (Low Mistreatment).

Unsurprisingly, members of Profile 4 (Low Mistreatment) fared the best across all organizational outcomes (i.e., reported the highest affective commitment scores, and lowest turnover intentions and retaliation scores). Surprisingly, we found few differences in terms of profile comparisons to correlates among profiles 1 (Intense Mistreatment), 2 (Moderate Mistreatment), and 3 (High Perceived Intent), suggesting that a high score on just one feature of mistreatment can result in worsened outcomes for targets. The one difference we did find between these profiles is that Profile 2 members reported significantly higher turnover intentions than Profile 3 members.

In terms of contextual factors, we found strong support that environmental factors are associated with mistreatment. For instance, members of Profile 4 reported the lowest perpetrator power and singled-out mistreatment scores, and the highest civility climate scores. Further,

individuals in profiles 1 and 2 reported higher perpetrator power and singled-out mistreatment and lower civility climate scores compared to Profile 3. Profiles 1 and 2 did not significantly differ from each other in terms of their scores on environmental factors related to mistreatment.

5.1 Limitations and Future Directions

Measurement of workplace mistreatment behaviours. Our aim was to create a measure that directly captures three important features of mistreatment: frequency, intensity, and perceived intentionality using a feature-based (and not behaviour-based) approach. As such, target experiences regarding specific workplace behaviours (e.g., verbal abuse, silent treatment, physical aggression, etc.) are not captured in our measure. We decided against measuring specific behaviours because it was not clear from our literature review which specific behaviours were representative of which workplace mistreatment constructs. Indeed, there is significant overlap in content across various mistreatment measures, suggesting that the same workplace mistreatment behaviours could be indicative of different workplace mistreatment constructs. For example, “My boss ridicules me” (Abusive Supervision), “Have you been yelled at or shouted at while you’ve been at work?” (Aggression/Violence), “Experienced repeated reminders of your blunders” (Bullying), “Has a co-worker humiliated or belittled you in front of others?” (Harassment), “Has a co-worker put you down in a condescending way” (Incivility), “How often are people rude to you at work?” (Interpersonal Conflict), and “Put you down when you questioned work procedures” (Social Undermining) are all meant to measure different types of workplace mistreatment that vary in terms of their severity, and yet are very similar behaviours. Thus, we believed that there was little utility in measuring workplace behaviours specifically and focused our efforts on directly measuring key features of mistreatment strength.

Retaliation. Further, although we found that mistreatment strength as measured by the FOM was negatively related to affective commitment and positively related to turnover intentions, we did not find evidence for this relationship with retaliation. As discussed in the introduction, one of the strongest antecedents of instigated mistreatment is experienced mistreatment (e.g., Chris et al., 2022; Inness et al., 2005; Park & Martinez, 2021). As such, our lack of consistent findings here is surprising. We suggest a few reasons why we did not find a clear pattern of results with retaliation.

First, our decision to measure retaliation and not instigated mistreatment more broadly may have influenced our findings. For example, a sample item of the scale we used to measure retaliation includes, "When I have experienced mistreatment at work, I engaged in retaliation". To answer this item, respondents must have a certain level of self-insight to understand their actions as retaliatory, and it is possible that some respondents do not view subsequent instigated mistreatment as retaliatory. Even if targets of mistreatment react negatively to their perpetrator, they may not view their actions as retaliation, and thus not be captured by our current measure.

Second, the findings that link experienced mistreatment with instigated mistreatment are correlational in nature (e.g., Chris et al., 2022; Lee et al., 2016), and therefore we do not know if the previous perpetrator becomes the subsequent target or if the instigated mistreatment is directed at someone else. Accordingly, it would be interesting to re-examine these findings with a measure of instigated mistreatment rather than measuring retaliation more directly.

Third, there may be circumstances where direct retaliation is not possible, and therefore targets may react to mistreatment by engaging in less positive behaviours toward the perpetrator rather than engaging in explicitly negative behaviours toward the perpetrator. For example, targets may reciprocate the mistreatment toward their perpetrator in a subtler way – such as

reduced helpfulness (e.g., Porath & Erez, 2009). Cortina et al. (2022) put forward a theory of biobehavioral responses to workplace incivility that outlines four potential responses to mistreatment: reciprocation/escalation, relationship repair, retreat from the situation, and recruitment of support. This theory posits that each response can be categorized by two continua: the approach - avoidance continuum and the low – high affiliation continuum. Specifically, both reciprocation/escalation and relationship repair involve an approach response whereas retreat from the situation and recruitment of support involve an avoidance response. Moreover, relationship repair and recruitment of support involve high affiliative response where the target is in search of positive social connection, whereas reciprocation/escalation and retreat from the situation involve a low affiliative response. Cortina et al.'s (2022) theory of biobehavioral responses to workplace incivility illustrate that retaliation is only one of many possible ways a target may process their mistreatment, and future research should investigate the key antecedents for each of these responses.

Fourth, we speculate that retaliation may be a more distal outcome of experienced mistreatment whereas affective commitment and turnover intentions are more proximal outcomes of experienced mistreatment. Our results can be framed according to the theory of planned behaviour (Ajzen, 2002), which posits that attitudes, norms, and perceived behavioural control predict behavioural intentions, and behavioural intentions ultimately predict behaviour. As such, we would expect a weaker relationship between experienced mistreatment and actual behaviour such as retaliation compared to attitudinal outcomes or behavioural intentions.

Finally, in Study 2 we found initial support that neuroticism was positively related to retaliation, and therefore there may be additional factors that can better predict retaliation over and above experienced mistreatment. Future research can investigate the relevant individual

traits and situational factures that predict retaliation to gain a more accurate perception of how and when individuals decide to retaliate their mistreatment.

Instigating workplace mistreatment. Although the workplace mistreatment literature tends to focus on the impact of mistreatment on the target, there are also costs associated with *instigating* mistreatment. Specifically, engaging in workplace mistreatment is negatively related to physical and psychological well-being (Park & Martinez, 2021), job satisfaction, and affective commitment (Blau & Andersson, 2005). In other words, people who mistreat others suffer as well. Although this was outside of the scope of our research, there is value in extending these findings to measure instigated mistreatment in terms of frequency, intensity, and perceived intentionality from the perspective of the perpetrator. This approach can allow us to examine the nomological network of instigating different forms of mistreatment – that is, are the outcomes for perpetrators of incivility similar to the outcomes for perpetrators of bullying?

Future research should assess the various antecedents of different types of instigated mistreatment with the FOM. Previous findings indicate that instigating workplace mistreatment is positively related to perpetrator reports of trait anger (Hershcovis et al., 2007; Park & Martinez, 2021), Machiavellianism, psychopathy (Dåderman & Ragnestål-Impola, 2019), narcissism (Park & Martinez, 2021), trait agreeableness (Park & Martinez, 2021) and honesty-humility (Dåderman & Ragnestål-Impola, 2019). Research has also found that men (Hershcovis et al., 2007; Park & Martinez, 2021) and younger adults (Feshbach, 1997; Park & Martinez, 2021) are more likely to be perpetrators of workplace mistreatment compared to women and older adults. It would be interesting to examine these relationships using a person-centered approach to examine antecedents of profile membership.

Workplace mistreatment interventions. Although the workplace mistreatment literature is vast, there is a need for more and better research regarding the effectiveness of various workplace mistreatment interventions (Caponecchia et al., 2020; Escartín, 2016; Hodgins et al. 2014; Vranjes & Lyubykh, 2021). Assessing workplace mistreatment in terms of its frequency, intensity, and intentionality may be a helpful first step for organizations to take before embarking on an expensive and long intervention effort. The Civility, Respect, and Engagement in the Workforce (CREW; Osatuke et al., 2009) intervention is arguably the most empirically-supported and effective strategy against workplace mistreatment; however, it is time-consuming and costly for organizations to implement (Hodgins et al., 2014). Interestingly, Escartín (2016) found that workplace mistreatment interventions were more likely to influence knowledge, attitudes, and perceptions than actual behaviour, and as such our measure of FOM may be uniquely positioned to capture post-intervention effects.

Workplace mistreatment over time. The development of the FOM may also be helpful in assessing the change in mistreatment strength over time. For example, Andersson and Pearson (1999) theorized that if left unaddressed, the accumulation of uncivil behaviours can permeate throughout organizations to create a much larger and more severe problem. Although this was outside the scope of our research, the workplace mistreatment literature would greatly benefit from longitudinal analyses of how and why workplace mistreatment changes over time. Examining what predicts movement from experiencing or instigating low mistreatment strength to more extreme mistreatment can help us better understand the workplace mistreatment process and ultimately prevent mistreatment from escalating in the future. Our findings suggest that individuals experiencing low levels of mistreatment are protected from experiencing poor work outcomes compared to individuals experiencing intense and moderate mistreatment, and thus it is

of particular interest to examine if mistreatment interventions are helpful in predicting movement from a high mistreatment profile to a low mistreatment profile.

5.2 Concluding Remarks

In conclusion, the workplace mistreatment literature is rife with construct and measurement overlap, and this has major implications for making empirical distinctions between constructs. To address this, we created and developed the FOM using a feature-based approach to directly assess three key features of mistreatment: frequency, intensity, and perceived intentionality. Measuring workplace mistreatment in terms of these three features allowed us to answer old questions with new measurement techniques. We found that individuals varied in terms of their general mistreatment strength, frequency, and intentionality, and that these could be represented by four distinct profiles of workplace mistreatment: Intense Mistreatment, Moderate Mistreatment, High Perceived Intent, and Low Mistreatment. In terms of outcomes, the data suggests that members in the Low Mistreatment profile fared comparatively better than the other mistreatment profiles. Thus, directly measuring key features of mistreatment provided us with a novel opportunity to empirically distinguish the correlates and outcomes of various profiles of mistreatment.

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Appendix A

Item Mapping Results for Environmental Factors

Perpetrator Power

Item	% sorted correctly (N = 11)
1. From someone that was higher up than you in the organization.	90.9%
2. From someone that had more power than you at work.	100.0%
3. From someone that held power over your work outcomes.	90.9%
4. From someone with the power to make important decisions about your job.	80.8%
5. From someone with more decision-making power than you at work.	90.9%
6. From someone in charge of your workload.	90.9%
7. From someone that formally evaluated your work.	100.0%
8. From someone that had influence over your career trajectory.	100.0%
9. From someone that you directly report to.	90.9%
10. From someone that assigns you work tasks.	100.0%

Note. Respondents are first shown an item stem stating, “In the past year, have you experienced workplace mistreatment…”

Singled-Out Mistreatment

Item	% sorted correctly (N = 11)
1. I believe that my colleagues are treated with more respect than I am.	100.0%
2. I experience unfair criticism more than others do at my work.	100.0%
3. I have to work harder than my co-workers to have my ideas accepted.	100.0%
4. My co-workers do not experience the same rude behaviour that I do.	100.0%
5. Compared to my co-workers, I am treated with less respect.	100.0%
6. Compared to my co-workers, I experience more mistreatment.	100.0%
7. I receive the brunt of the mistreatment at my workplace.	100.0%
8. I am treated worse than my co-workers.	100.0%
9. My co-workers are treated with more civility than I am.	100.0%
10. Most of the mistreatment in my workplace is directed at me.	100.0%

Note. Respondents are first shown an item stem stating, “Please think about your workplace and state your level of agreement to the following questions…”

Civility Climate

Item	% sorted correctly (N = 11)
1. My workplace is free from bullying.	100.0%
2. There is a culture of civility at my work.	100.0%
3. If a stranger were to visit my workplace, they would think it had a culture of respect.	100.0%
4. Most of my co-workers are respectful and polite.	100.0%
5. There are policies in place to deal with negative behaviours.	100.0%
6. I trust that my manager(s) would take bullying seriously.	100.0%
7. My organization values civility and respect.	100.0%
8. I would feel comfortable going to my manager about a coworkers' behaviour.	100.0%
9. I know who to go to if I had a problem with a co-worker's behavior.	100.0%
10. Incivility goes against my organizations' values.	100.0%

Note. Respondents are first shown an item stem stating, "Please think about your workplace and state your level of agreement to the following questions…"

Appendix B

Study 1 Survey Measures

Part I: Features of Mistreatment

In the past year, have you experienced workplace mistreatment…

Frequency

1. That was frequent.
2. That occurred daily.
3. That happened often.
4. That happened regularly.
5. That repeatedly occurred.
6. That was constant.
7. That became routine.
8. That became repetitive.
9. That happened over a long period of time.
10. That became part of your day-to-day work life.

Intensity

1. That was severe.
2. That was extreme.
3. That was intense.
4. That was serious in nature.
5. That was disproportionately harsh.
6. That was unreasonably mean.
7. That was unforgiveable.
8. That was completely unjustified.

Perceived Intentionality

1. Where you felt someone targeted you at work.
2. Where you felt someone intentionally mistreated you.
3. Where you felt someone purposely took advantage of you.
4. Where you felt someone deliberately wronged you.
5. Where you felt someone was “out to get you”.
6. Where you felt someone had a personal vendetta against you.
7. Where you felt someone was deliberately trying to hurt you.
8. Where you felt someone had malicious intent towards you.
9. Where you felt someone wanted you to fail.
10. Where you felt someone purposely disrespected you.

Perpetrator Power

1. From someone that was higher up than you in the organization.
2. From someone that had more power than you at work.
3. From someone that held power over your work outcomes.
4. From someone with the power to make important decisions about your job.
5. From someone with more decision-making power than you at work.
6. From someone in charge of your workload.
7. From someone that formally evaluated your work.
8. From someone that had influence over your career trajectory.
9. From someone that you directly report to.
10. From someone that assigns you work tasks.

Part II: Correlates of Mistreatment Measure

Please think about your workplace and state your level of agreement to the following questions.

Singled-Out Mistreatment

11. I believe that my colleagues are treated with more respect than I am.
12. I experience unfair criticism more than others do at my work.

13. I have to work harder than my co-workers to have my ideas accepted.
14. My co-workers do not experience the same rude behaviour that I do.
15. Compared to my co-workers, I am treated with less respect.
16. Compared to my co-workers, I experience more mistreatment.
17. I receive the brunt of the mistreatment at my workplace.
18. I am treated worse than my co-workers.
19. My co-workers are treated with more civility than I am.
20. Most of the mistreatment in my workplace is directed at me.

Civility Climate

21. My workplace is free from bullying.
22. There is a culture of civility at my work.
23. If a stranger were to visit my workplace, they would think it had a culture of respect.
24. Most of my co-workers are respectful and polite.
25. There are policies in place to deal with negative behaviours.
26. I trust that my manager(s) would take bullying seriously.
27. My organization values civility and respect.
28. I would feel comfortable going to my manager about a coworkers' behaviour.
29. I know who to go to if I had a problem with a co-worker's behavior.
30. Incivility goes against my organizations' values.

Workplace Incivility Scale (WIS; Cortina et al., 2001)

During the PAST YEAR, were you ever in a situation in which any of your supervisors or co-workers…

1. Paid little attention to your statements or showed little interest in your opinions.
2. Doubted your judgment on a matter over which you had responsibility
3. Gave you hostile looks, stares, or sneers
4. Addressed you in unprofessional terms, either publicly or privately
5. Interrupted or "spoke over" you

6. Rated you lower than you deserved on an evaluation
7. Yelled, shouted, or swore at you
8. Made insulting or disrespectful remarks about you
9. Ignored you or failed to speak to you (e.g., gave you "the silent treatment")
10. Accused you of incompetence
11. Targeted you with anger outbursts or "temper tantrums"
12. Made jokes at your expense

1 (*never*) to 5 (*many times*)

Negative Acts Questionnaire – Revised bullying (Einarsen et al., 2009)

During the past 6 months, were you ever in a situation in which any of your supervisors or co-workers…

Work-related bullying

1. Someone withholding information which affects your performance
2. Being ordered to do work below your level of competence
3. Having your opinions ignored
4. Being given tasks with unreasonable deadlines
5. Excessive monitoring of your work
6. Pressure not to claim something to which by right you are entitled (e.g. sick leave, holiday entitlement, travel expenses)
7. Being exposed to an unmanageable workload

Person-related bullying

1. Being humiliated or ridiculed in connection with your work
2. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks
3. Spreading of gossip and rumours about you
4. Being ignored or excluded

5. Having insulting or offensive remarks made about your person, attitudes or your private life
6. Hints or signals from others that you should quit your job
7. Repeated reminders of your errors or mistakes
8. Being ignored or facing a hostile reaction when you approach
9. Persistent criticism of your errors or mistakes
10. Practical jokes carried out by people you don't get along with
11. Having allegations made against you
12. Being the subject of excessive teasing and sarcasm

Physically intimidating bullying

1. Being shouted at or being the target of spontaneous anger
2. Intimidating behaviours such as finger-pointing, invasion of personal space, shoving, blocking your way
3. Threats of violence or physical abuse or actual abuse

1 (*never*) to 5 (*daily*)

Abusive Supervision (Tepper, 2000)

My boss…

1. Ridicules me
2. Tells me my thoughts or feelings are stupid
3. Gives me the silent treatment
4. Puts me down in front of others
5. Invades my privacy
6. Reminds me of my past mistakes and failures
7. Doesn’t give me credit for jobs requiring a lot of effort
8. Blames me to save themself from embarrassment
9. Breaks promises they make
10. Expresses anger at me when they are mad for another reason

11. Makes negative comments about me to others
12. Is rude to me
13. Does not allow me to interact with my co-workers
14. Tells me I'm incompetent
15. Lies to me

1 (*never*) to 5 (*very often*)

Affective Commitment (Allen & Meyer, 1990)

1. I would be very happy to spend the rest of my career with this organisation.
2. I really feel as if this organisation's problems are my own.
3. I do not feel a strong sense of belonging to my organisation. (R)
4. I do not feel emotionally attached to this organisation. (R)
5. I do not feel like part of the family at my organisation. (R)
6. This organisation has a great deal of personal meaning for me.

1 (*strongly disagree*) to 7 (*strongly agree*)

Minnesota Satisfaction Questionnaire Short-Form (Weiss et al., 1967)

On my present job, this is how I feel about…

1. Being able to keep busy all the time
2. The chance to work alone on the job
3. The chance to do different things from time to time
4. The chance to be "somebody" in the community
5. The way my boss handles his/her workers
6. The competence of my supervisor in making decisions
7. Being able to do things that don't go against my conscience
8. The way my job provides for steady employment
9. The chance to do things for other people
10. The chance to tell people what to do
11. The chance to do something that makes use of my abilities
12. The way company policies are put into practice
13. My pay and the amount of work I do

14. The chances for advancement on this job
15. The freedom to use my own judgment
16. The chance to try my own methods of doing the job
17. The working conditions
18. The way my co-workers get along with each other
19. The praise I get for doing a good job
20. The feeling of accomplishment I get from the job

1 (*very dissatisfied*) to 5 (*very satisfied*)

Extraversion

1. I feel comfortable around people.
2. I make friends easily.
3. I am skilled in handling social situations.
4. I am the life of the party.
5. I know how to captivate people.
6. I have little to say. (R)
7. I keep in the background. (R)
8. I would describe my experiences as somewhat dull. (R)
9. I don't like to draw attention to myself. (R)
10. I don't talk a lot. (R)

Part III: Impression Management and Attention Check

Attention Check items

1. To show that you are reading each question carefully, please choose “agree” as your response to this question.
2. To show that you are reading each question carefully, please choose “strongly disagree” as your response to this question.
3. To show that you are reading each question carefully, please choose “neutral” as your response to this question.

Bidimensional Impression Management Index

Agentic Management

1. My decisions are sometimes unwise. (R)
2. I have met people smarter than myself. (R)
3. I have mastered every challenge put before me in life.
4. You can't win at everything. (R)
5. My personality has a few problems. (R)
6. I am always brave in threatening situations.
7. Some people call me a genius.
8. My leadership of the group guarantees the group's success.
9. I sometimes need other people's help to get things done. (R)
10. I'm usually the one to come up with the big ideas.

Communal Management

1. I have done things that I don't tell other people about. (R)
2. I don't gossip about other people's business.
3. There have been occasions when I have taken advantage of someone. (R)
4. I have said something bad about a friend behind their back. (R)
5. I sometimes tell lies if I have to. (R)
6. I never swear.
7. I never cover up my mistakes.
8. When I hear people talking privately, I avoid listening.
9. I have never dropped litter on the street.
10. I often drive faster than the speed limit. (R)

Part IV: Demographic Measure

<u>Biographical Informational</u>

Gender identity:

- Man
- Woman
- Nonbinary

- You do not have an option that applies to me. I identify as (please specify):

  _____

What is your ethnicity?

- Black (i.e., African, Caribbean)
- Asian (i.e., Chinese, Japanese, Vietnamese)
- East Asian (i.e., Indian, Pakistani)
- Hispanic
- White
- You do not have an option that applies to me. I identify as (please specify):

  _____

What is your primary language:

- English
- Other – please specify: _____

Please choose your age from the drop-down list: ___

Employment Information

Have you ever had a job? Please choose the option that describes your highest level of employment:

__No, I have never had a job

__Yes, I have had a full-time job (25 or more hours per week)

__Yes, I have had a part-time job (10 - 24 hours per week)

__ Yes, I have had a part-time job (9 hours or fewer per week)

What type of work have you done (choose all that apply):

__Retail Sales

__Cashier

__Office Clerk

__Food Service/Food Preparation

__Nurse, Nursing Assistant, Orderly, or Personal Service Worker

__Waiter or Waitress

__Customer Service Representative

__Material Mover (truck driver, truck loader, loading dock worker, baggage handler)

__Janitor

__Stock Clerk or Order filler (working in storage facilities, warehouses, or shipping/receiving)

__Management

__Education

__Manufacturing

__Other, please specify: _____

What is the highest level of school you have completed or the highest degree you have received?

__Less than high school degree

__High school degree or equivalent (e.g., GED)

__Some college but no degree

__Skilled trade certification (e.g., plumber, electrician, carpenter, etc.)

__College degree or certification

__Associate degree

__Bachelor's degree

__Graduate degree (e.g., M.A., M.Sc., Ph.D.)

__Other, please specify: _____

Appendix C

Standardized Factors Loadings for Study 1: Full and Shortened Perpetrator Power scale

Full Scale:

Item	Power	Residuals
P1	.94***	.12***
P2	.94***	.12***
P3	.90***	.19***
P4	.92***	.15***
P5	.95***	.09***
P6	.90***	.19***
P7	.87***	.24***
P8	.90***	.19***
P9	.92***	.15***
P10	.89***	.21***

Note. *** indicates $p < .001$.

Shortened Scale:

Item	Power	Residuals
P4	.90***	.19***
P6	.92***	.15***
P9	.94***	.11***
P10	.92***	.15***

Note. *** indicates $p < .001$.

Appendix D

Standardized Factors Loadings for Study 1: Full and Shortened Singled-Out Mistreatment scale

Full Scale:

Item	Singled-Out	Residuals
SOM1	.99***	.21***
SOM2	.85***	.27***
SOM3	.79***	.38***
SOM4	.74***	.45***
SOM5	.89***	.21***
SOM6	.90***	.19***
SOM7	.85***	.28***
SOM8	.90***	.19***
SOM9	.91***	.18***
SOM10	.79***	.38***

Note. *** indicates $p < .001$.

Shortened Scale:

Item	Singled-Out	Residuals
SOM1	.89***	.20***
SOM6	.89***	.22***
SOM8	.90***	.18***
SOM9	.91***	.17***

Note. *** indicates $p < .001$.

Appendix E

Standardized Factors Loadings for Study 1: Full and Shortened Civility Climate scale

Full Scale:

Item	Civil	Residuals
CIV1	.61***	.63***
CIV2	.73***	.47***
CIV3	.62***	.62***
CIV4	.54***	.71***
CIV5	.59***	.65***
CIV6	.82***	.32***
CIV7	.77***	.41***
CIV8	.77***	.41***
CIV9	.76***	.43***
CIV10	.50***	.75***

Note. *** indicates $p < .001$.

Shortened Scale:

Item	Civil	Residuals
CIV2	.67***	.56***
CIV6	.84***	.30***
CIV7	.74***	.45***
CIV8	.80***	.36***

Note. *** indicates $p < .001$.

Appendix F

Additional Environmental Factors Full and Shortened Scales

Perpetrator Power

In the past year, have you experienced workplace mistreatment…

1. From someone that was higher up than you in the organization.
2. From someone that had more power than you at work.
3. From someone that held power over your work outcomes.
4. **From someone with the power to make important decisions about your job.**
5. From someone with more decision-making power than you at work.
6. **From someone in charge of your workload.**
7. From someone that formally evaluated your work.
8. From someone that had influence over your career trajectory.
9. **From someone that you directly report to.**
10. **From someone that assigns you work tasks.**

* boldface indicates item chosen for shortened scale.

Singled-Out Mistreatment

Please think about your workplace and state your level of agreement to the following questions…

1. **I believe that my colleagues are treated with more respect than I am.**
2. I experience unfair criticism more than others do at my work.
3. I have to work harder than my co-workers to have my ideas accepted.
4. My co-workers do not experience the same rude behaviour that I do.
5. Compared to my co-workers, I am treated with less respect.
6. **Compared to my co-workers, I experience more mistreatment.**
7. I receive the brunt of the mistreatment at my workplace.
8. **I am treated worse than my co-workers.**
9. **My co-workers are treated with more civility than I am.**
10. Most of the mistreatment in my workplace is directed at me.

* boldface indicates item chosen for shortened scale.

Civility Climate

Please think about your workplace and state your level of agreement to the following questions…

1. My workplace is free from bullying.
2. **There is a culture of civility at my work.**
3. If a stranger were to visit my workplace, they would think it had a culture of respect.
4. Most of my co-workers are respectful and polite.

5. There are policies in place to deal with negative behaviours.
6. **I trust that my manager(s) would take bullying seriously.**
7. **My organization values civility and respect.**
8. **I would feel comfortable going to my manager about a coworkers' behaviour.**
9. I know who to go to if I had a problem with a co-worker's behavior.
10. Incivility goes against my organizations' values.

* boldface indicates item chosen for shortened scale.

Appendix G

Study 2 Survey Measures

Part I: Features of Mistreatment

In the past year, have you experienced workplace mistreatment…

Frequency

1. That happened often.
2. That happened regularly.
3. That repeatedly occurred.
4. That was constant.

Intensity

1. That was severe.
2. That was extreme.
3. That was intense.
4. That was serious in nature.

Perceived Intentionality

1. Where you felt someone targeted you at work.
2. Where you felt someone deliberately wronged you.
3. Where you felt someone had malicious intent towards you.
4. Where you felt someone wanted you to fail.

Perpetrator Power

1. From someone with the power to make important decisions about your job.
2. From someone in charge of your workload.
3. From someone that you directly report to.
4. From someone that assigns you work tasks.

Part II: Correlates of Mistreatment Measure

Please think about your workplace and state your level of agreement to the following questions.

Singled-Out Mistreatment

1. I believe that my colleagues are treated with more respect than I am.
2. Compared to my co-workers, I experience more mistreatment.
3. I am treated worse than my co-workers.
4. My co-workers are treated with more civility than I am.

Civility Climate

1. There is a culture of civility at my work.
2. I trust that my manager(s) would take bullying seriously.
3. My organization values civility and respect.
4. I would feel comfortable going to my manager about a coworkers' behaviour.

Workplace Incivility Scale (WIS; Cortina et al., 2001)

During the PAST YEAR, were you ever in a situation in which any of your supervisors or co-workers…

1. Paid little attention to your statements or showed little interest in your opinions.
2. Doubted your judgment on a matter over which you had responsibility
3. Gave you hostile looks, stares, or sneers
4. Addressed you in unprofessional terms, either publicly or privately
5. Interrupted or "spoke over" you
6. Rated you lower than you deserved on an evaluation
7. Yelled, shouted, or swore at you
8. Made insulting or disrespectful remarks about you
9. Ignored you or failed to speak to you (e.g., gave you "the silent treatment")
10. Accused you of incompetence
11. Targeted you with anger outbursts or "temper tantrums"
12. Made jokes at your expense

1 (*never*) to 5 (*many times*)

Negative Acts Questionnaire – Revised bullying (Einarsen et al., 2009)

During the past 6 months, were you ever in a situation in which any of your supervisors or co-workers…

Work-related bullying

1. Someone withholding information which affects your performance
2. Being ordered to do work below your level of competence
3. Having your opinions ignored
4. Being given tasks with unreasonable deadlines
5. Excessive monitoring of your work
6. Pressure not to claim something to which by right you are entitled (e.g. sick leave, holiday entitlement, travel expenses)
7. Being exposed to an unmanageable workload

Person-related bullying

1. Being humiliated or ridiculed in connection with your work
2. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks
3. Spreading of gossip and rumours about you
4. Being ignored or excluded
5. Having insulting or offensive remarks made about your person, attitudes or your private life
6. Hints or signals from others that you should quit your job
7. Repeated reminders of your errors or mistakes
8. Being ignored or facing a hostile reaction when you approach
9. Persistent criticism of your errors or mistakes
10. Practical jokes carried out by people you don't get along with
11. Having allegations made against you
12. Being the subject of excessive teasing and sarcasm

Physically intimidating bullying

1. Being shouted at or being the target of spontaneous anger
2. Intimidating behaviours such as finger-pointing, invasion of personal space, shoving, blocking your way

3. Threats of violence or physical abuse or actual abuse

1 (*never*) to 5 (*daily*)

Abusive Supervision (Tepper, 2000)

My boss…

1. Ridicules me
2. Tells me my thoughts or feelings are stupid
3. Gives me the silent treatment
4. Puts me down in front of others
5. Invades my privacy
6. Reminds me of my past mistakes and failures
7. Doesn't give me credit for jobs requiring a lot of effort
8. Blames me to save themself from embarrassment
9. Breaks promises they make
10. Expresses anger at me when they are mad for another reason
11. Makes negative comments about me to others
12. Is rude to me
13. Does not allow me to interact with my co-workers
14. Tells me I'm incompetent
15. Lies to me

1 (*never*) to 5 (*very often*)

Extraversion

1. I feel comfortable around people.
2. I make friends easily.
3. I am skilled in handling social situations.
4. I am the life of the party.
5. I know how to captivate people.
6. I have little to say. (R)
7. I keep in the background. (R)
8. I would describe my experiences as somewhat dull. (R)

9. I don't like to draw attention to myself. (R)
10. I don't talk a lot. (R)

Neuroticism

1. Often feel blue.
2. Dislike myself.
3. Am often down in the dumps.
4. Have frequent mood swings.
5. Panic easily.
6. Rarely get irritated. (R)
7. Seldom feel blue. (R)
8. Feel comfortable with myself. (R)
9. Am not easily bothered by things. (R)
10. Am very pleased with myself. (R)

Negative Affective Reactions to Mistreatment (Bunk & Magley, 2013)

You have been previously asked about your experiences with mistreatment at work. Please think about how you were feeling during these interactions and rate your level of agreement to each item.

Anger

1. Frustrated
2. Irritated
3. Angry

Guilty

4. Guilty
5. Ashamed
6. Regretful

Sad

7. Sad
8. Disappointed
9. Hurt

Anxious

10. Nervous
11. Anxious
12. Afraid

Disgusted

13. Disgusted
14. Repulsed
15. Offended

1 (does not describe my feelings) to 5 (clearly describes my feelings)

Affective Commitment (Allen & Meyer, 1990)

1. I would be very happy to spend the rest of my career with this organisation.
2. I really feel as if this organisation's problems are my own.
3. I do not feel a strong sense of belonging to my organisation. (R)
4. I do not feel emotionally attached to this organisation. (R)
5. I do not feel like part of the family at my organisation. (R)
6. This organisation has a great deal of personal meaning for me.

1 (*strongly disagree*) to 7 (*strongly agree*)

Turnover Intentions Scale (TIS-6; Bothma & Roodt, 2013)

1. How often have you considered leaving your job?
    a. Never to Always
2. How satisfying is your job in fulfilling your personal needs?
    a. Very Satisfying to Very Dissatisfying
3. How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?
    a. Never to Always
4. How often do you dream about getting another job that will better suit your personal needs?
    a. Never to Always

5. How likely are you to accept another job at the same compensation level should it be offered to you?
    a. Highly Unlikely to Highly Likely
6. How often do you look forward to another day at work? (R)
    a. Never to Always

Retaliation Measure

You have been previously asked about your experiences with mistreatment at work. Please think about your own behaviour after experiencing mistreatment from your coworker(s)/supervisor(s). If you have not experienced any mistreatment, please select not applicable.

When I have experienced mistreatment at work…

1. I engaged in retaliation
2. I stood up for myself by being rude back
3. I defended myself
4. I matched their rude behaviour

1 (strongly disagree) to 5 (strongly agree), with an option to select 0 (not applicable)

Part III: Impression Management and Attention Check

Attention Check Items

1. To show that you are reading each question carefully, please choose “agree” as your response to this question.
2. To show that you are reading each question carefully, please choose “strongly disagree” as your response to this question.
3. To show that you are reading each question carefully, please choose “neutral” as your response to this question.

Bidimensional Impression Management Index

Agentic Management

1. My decisions are sometimes unwise. (R)
2. I have met people smarter than myself. (R)
3. I have mastered every challenge put before me in life.

4. You can't win at everything. (R)
5. My personality has a few problems. (R)
6. I am always brave in threatening situations.
7. Some people call me a genius.
8. My leadership of the group guarantees the group's success.
9. I sometimes need other people's help to get things done. (R)
10. I'm usually the one to come up with the big ideas.

Communal Management

1. I have done things that I don't tell other people about. (R)
2. I don't gossip about other people's business.
3. There have been occasions when I have taken advantage of someone. (R)
4. I have said something bad about a friend behind their back. (R)
5. I sometimes tell lies if I have to. (R)
6. I never swear.
7. I never cover up my mistakes.
8. When I hear people talking privately, I avoid listening.
9. I have never dropped litter on the street.
10. I often drive faster than the speed limit. (R)

Part IV: Demographic Measure

Biographical Informational

Gender identity (check all that apply):

- o Man
- o Woman
- o Nonbinary
- o Transgender
- o Prefer to self-identify: _____
- o Prefer not to answer

What is your ethnicity? (check all that apply):

- Black (i.e., African, Caribbean)
- Asian (i.e., Chinese, Japanese, Indian)
- Indigenous (i.e., Alaska Native, Native American, First Nations, Inuit, Métis)
- Hispanic, Latino/a/x, or Spanish origin
- Middle Eastern or Northern African
- Native Hawaiian or Pacific Islander
- White
- You do not have an option that applies to me (please specify): _____
- Prefer not to answer

Where is your primary country of residence?

- Canada
- United States of America
- Other (please specify): _____

What is your primary language:

- English
- Other – please specify: _____

Please choose your age from the drop-down list: ___

Employment Information

Please choose the option that describes your current level of employment in hospitality:

__I do not currently work in hospitality

__I have a full-time job (25 or more hours per week)

__I have a part-time job (10 - 24 hours per week)

__I have a part-time job (9 hours or fewer per week)

What best describes your current role in hospitality:

__Food Service/Food Preparation

__Waiter or Waitress

__Travel/Tourism

__Lodging

__Other, please specify: _____

Appendix H

Study 2 Time 2 Survey Measures

Part I: Outcomes of Mistreatment

Negative Affective Reactions to Mistreatment (Bunk & Magley, 2013)

You have been previously asked about your experiences with mistreatment at work. Please think about how you were feeling during these interactions and rate your level of agreement to each item.

Anger

16. Frustrated
17. Irritated
18. Angry

Guilty

19. Guilty
20. Ashamed
21. Regretful

Sad

22. Sad
23. Disappointed
24. Hurt

Anxious

25. Nervous
26. Anxious
27. Afraid

Disgusted

28. Disgusted
29. Repulsed
30. Offended

1 (does not describe my feelings) to 5 (clearly describes my feelings)

Affective Commitment (Allen & Meyer, 1990)

7. I would be very happy to spend the rest of my career with this organisation.
8. I really feel as if this organisation's problems are my own.
9. I do not feel a strong sense of belonging to my organisation. (R)
10. I do not feel emotionally attached to this organisation. (R)
11. I do not feel like part of the family at my organisation. (R)
12. This organisation has a great deal of personal meaning for me.

1 (*strongly disagree*) to 7 (*strongly agree*)

Turnover Intentions Scale (TIS-6; Bothma & Roodt, 2013)

7. How often have you considered leaving your job?
    a. Never to Always
8. How satisfying is your job in fulfilling your personal needs?
    a. Very Satisfying to Very Dissatisfying
9. How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?
    a. Never to Always
10. How often do you dream about getting another job that will better suit your personal needs?
    a. Never to Always
11. How likely are you to accept another job at the same compensation level should it be offered to you?
    a. Highly Unlikely to Highly Likely
12. How often do you look forward to another day at work? (R)
    a. Never to Always

Retaliation Measure

You have been previously asked about your experiences with mistreatment at work. Please think about your own behaviour after experiencing mistreatment from your coworker(s)/supervisor(s). If you have not experienced any mistreatment, please select not applicable.

When I have experienced mistreatment at work…

5. I engaged in retaliation
6. I stood up for myself by being rude back
7. I defended myself
8. I matched their rude behaviour

1 (strongly disagree) to 5 (strongly agree), with an option to select 0 (not applicable)

Part II: Demographic Measure

Biographical Informational

Gender identity (check all that apply):

- Man
- Woman
- Nonbinary
- Transgender
- Prefer to self-identify: _____
- Prefer not to answer

What is your ethnicity? (check all that apply):

- Black (i.e., African, Caribbean)
- Asian (i.e., Chinese, Japanese, Indian)
- Indigenous (i.e., Alaska Native, Native American, First Nations, Inuit, Métis)
- Hispanic, Latino/a/x, or Spanish origin
- Middle Eastern or Northern African
- Native Hawaiian or Pacific Islander
- White
- You do not have an option that applies to me (please specify): _____
- Prefer not to answer

Where is your primary country of residence?

- Canada
- United States of America

- Other (please specify): _____

What is your primary language:

- English
- Other – please specify: _____

Please choose your age from the drop-down list: ___

Employment Information

Please choose the option that describes your current level of employment in hospitality:

__I do not currently work in hospitality

__I have a full-time job (25 or more hours per week)

__I have a part-time job (10 - 24 hours per week)

__I have a part-time job (9 hours or fewer per week)

What best describes your current role in hospitality:

__Food Service/Food Preparation

__Waiter or Waitress

__Travel/Tourism

__Lodging

__Other, please specify: _____

Appendix I

Fit Indices for Study 2 Environmental Factors

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
Perpetrator Power 1-Factor CFA	1.40	2	1.00	1.00	.00	[.00, .11]	.00
Singled-Out Mistreatment 1-Factor CFA	9.91**	2	.99	.96	.13	[.06, .21]	.02
Civility Climate 1-Factor CFA	2.69	2	1.00	1.00	.04	[.00, .14]	.01

Note. ** indicates $p < .01$.

Appendix J

Standardized Factor Loadings for Study 2 Environmental Factors

Perpetrator Power:

Item	Power	Residuals
P1	.86***	.27***
P2	.94***	.13***
P3	.90***	.20***
P4	.95***	.10***

Note. *** indicates $p < .001$.

Singled-Out Mistreatment:

Item	Singled-Out	Residuals
SOM1	.79***	.37***
SOM2	.82***	.32***
SOM3	.93***	.14***
SOM4	.78***	.39***

Note. *** indicates $p < .001$.

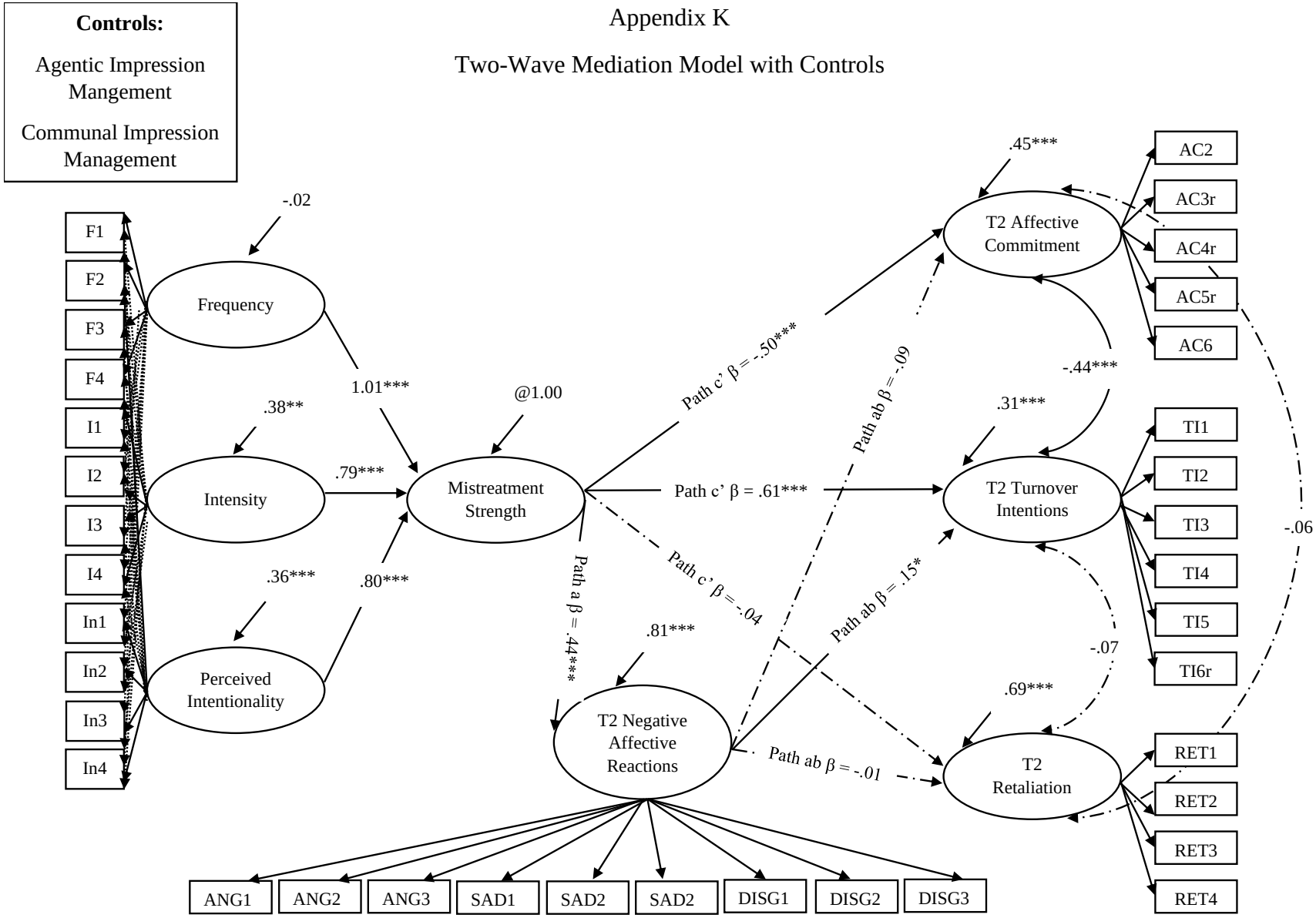
Civility Climate:

Item	Civil	Residuals
CIV1	.75***	.44***
CIV2	.80***	.35***
CIV3	.88***	.22***
CIV4	.69***	.52***

Note. *** indicates $p < .001$.

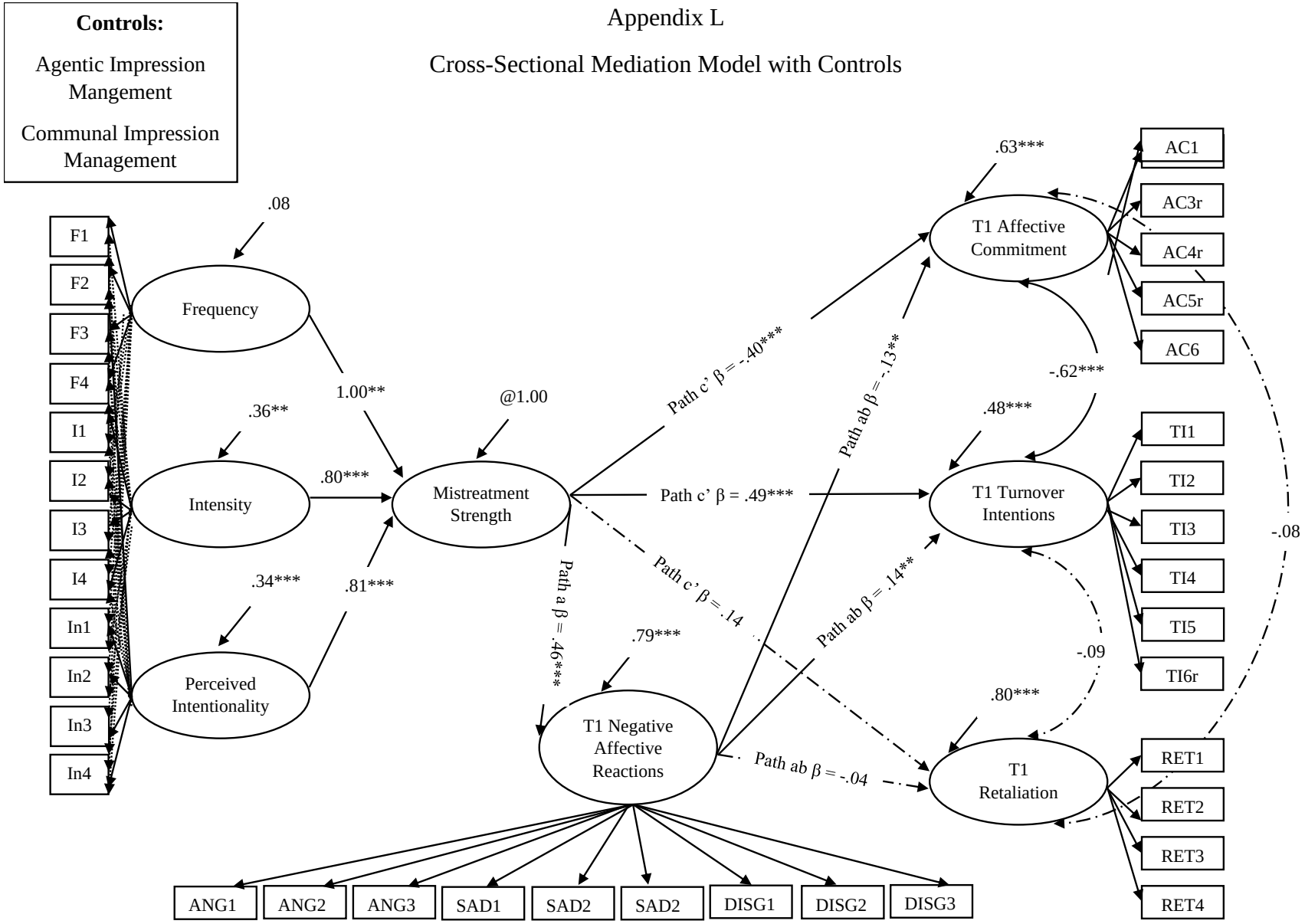
Appendix K

Two-Wave Mediation Model with Controls



Appendix L

Cross-Sectional Mediation Model with Controls



Appendix M

Study 3 Survey Measures

Part I: Features of Mistreatment

In the past year, have you experienced workplace mistreatment…

Frequency

1. That happened often.
2. That happened regularly.
3. That repeatedly occurred.
4. That was constant.

Intensity

1. That was severe.
2. That was extreme.
3. That was intense.
4. That was serious in nature.

Perceived Intentionality

1. Where you felt someone targeted you at work.
2. Where you felt someone deliberately wronged you.
3. Where you felt someone had malicious intent towards you.
4. Where you felt someone wanted you to fail.

Perpetrator Power

1. From someone with the power to make important decisions about your job.
2. From someone in charge of your workload.
3. From someone that you directly report to.
4. From someone that assigns you work tasks.

Part II: Correlates of FOM

Please think about your workplace and state your level of agreement to the following questions.

Singled-Out Mistreatment

1. I believe that my colleagues are treated with more respect than I am.
2. Compared to my co-workers, I experience more mistreatment.
3. I am treated worse than my co-workers.
4. My co-workers are treated with more civility than I am.

Civility Climate

1. There is a culture of civility at my work.
2. I trust that my manager(s) would take bullying seriously.
3. My organization values civility and respect.
4. I would feel comfortable going to my manager about a coworkers' behaviour.

Affective Commitment (Allen & Meyer, 1990)

1. I would be very happy to spend the rest of my career with this organisation.
2. I really feel as if this organisation's problems are my own.
3. I do not feel a strong sense of belonging to my organisation. (R)
4. I do not feel emotionally attached to this organisation. (R)
5. I do not feel like part of the family at my organisation. (R)
6. This organisation has a great deal of personal meaning for me.

1 (*strongly disagree*) to 7 (*strongly agree*)

Turnover Intentions Scale (TIS-6; Bothma & Roodt, 2013)

1. How often have you considered leaving your job?
    a. Never to Always
2. How satisfying is your job in fulfilling your personal needs?
    a. Very Satisfying to Very Dissatisfying
3. How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?
    a. Never to Always
4. How often do you dream about getting another job that will better suit your personal needs?
    a. Never to Always
5. How likely are you to accept another job at the same compensation level should it be offered to you?
    a. Highly Unlikely to Highly Likely
6. How often do you look forward to another day at work? (R)
    a. Never to Always

Retaliation Measure

You have been previously asked about your experiences with mistreatment at work. Please think about your own behaviour after experiencing mistreatment from your co-worker(s)/supervisor(s).

If you have not experienced any mistreatment, please select not applicable.

When I have experienced mistreatment at work…

1. I engaged in retaliation
2. I stood up for myself by being rude back
3. I defended myself
4. I matched their rude behaviour

1 (strongly disagree) to 5 (strongly agree), with an option to select 0 (not applicable)

Part III: Impression Management and Attention Check

Attention Check items*

1. To show that you are reading each question carefully, please choose "agree" as your response to this question.
2. To show that you are reading each question carefully, please choose "strongly disagree" as your response to this question.
3. To show that you are reading each question carefully, please choose "neutral" as your response to this question.

*Items are dispersed throughout survey

Bidimensional Impression Management Index

Agentic Management

1. My decisions are sometimes unwise. (R)
2. I have met people smarter than myself. (R)
3. I have mastered every challenge put before me in life.
4. You can't win at everything. (R)
5. My personality has a few problems. (R)
6. I am always brave in threatening situations.
7. Some people call me a genius.
8. My leadership of the group guarantees the group's success.
9. I sometimes need other people's help to get things done. (R)
10. I'm usually the one to come up with the big ideas.

Communal Management

1. I have done things that I don't tell other people about. (R)
2. I don't gossip about other people's business.
3. There have been occasions when I have taken advantage of someone. (R)
4. I have said something bad about a friend behind their back. (R)

5. I sometimes tell lies if I have to. (R)
6. I never swear.
7. I never cover up my mistakes.
8. When I hear people talking privately, I avoid listening.
9. I have never dropped litter on the street.
10. I often drive faster than the speed limit. (R)

Part IV: Demographic Measure

Biographical Informational

Gender identity (check all that apply):

- Man
- Woman
- Nonbinary
- Transgender
- Prefer to self-identify: _____
- Prefer not to answer

What is your ethnicity? (check all that apply):

- Black (i.e., African, Caribbean)
- Asian (i.e., Chinese, Japanese, Indian)
- Indigenous (i.e., Alaska Native, Native American, First Nations, Inuit, Métis)
- Hispanic, Latino/a/x, or Spanish origin
- Middle Eastern or Northern African
- Native Hawaiian or Pacific Islander
- White
- You do not have an option that applies to me (please specify): _____
- Prefer not to answer

Where is your primary country of residence?

- Canada
- United States of America
- Other (please specify): _____

What is your primary language:

- English
- Other – please specify: _____

Please choose your age from the drop-down list: ___

Employment Information

Please choose the option that describes your current level of employment in hospitality:

__I do not currently work in hospitality

__I have a full-time job (25 or more hours per week)

__I have a part-time job (10 - 24 hours per week)

__I have a part-time job (9 hours or fewer per week)

What best describes your current role in hospitality:

__Food Service/Food Preparation

__Waiter or Waitress

__Travel/Tourism

__Lodging

__Other, please specify: _____

Appendix N

Fit Indices for Study 3 Environmental Factors

Model	X^2	df	CFI	TLI	RMSEA	RMSEA 90% CI	SRMR
Perpetrator Power 1-Factor CFA	5.47	2	1.00	1.00	.05	[.00, .10]	.00
Singled-Out Mistreatment 1-Factor CFA	38.53***	2	.99	.96	.15	[.11, .20]	.02
Civility Climate 1-Factor CFA	41.55***	2	.97	.90	.16	[.12, .20]	.03

Note. *** indicates $p < .001$.

Appendix O

Standardized Factor Loadings for Study 3 Environmental Factors

Perpetrator Power:

Item	Power	Residuals
P1	.89***	.21***
P2	.95***	.10***
P3	.93***	.13***
P4	.94***	.11***

Note. *** indicates $p < .001$.

Singled-Out Mistreatment:

Item	Singled-Out	Residuals
SOM1	.77***	.42***
SOM2	.92***	.15***
SOM3	.93***	.13***
SOM4	.87***	.25***

Note. *** indicates $p < .001$.

Civility Climate:

Item	Civil	Residuals
CIV1	.42***	.82***
CIV2	.87***	.24***
CIV3	.77***	.40***
CIV4	.77***	.41***

Note. *** indicates $p < .001$.

SARAH J. CARVER

PhD Candidate

EDUCATION

Doctor of Philosophy (Ph.D.) **Expected 2023**
Industrial-Organizational Psychology, University of Western Ontario, Canada
Supervisor Dr. Joan Finegan

Master of Science (M.Sc.) **2019**
Industrial-Organizational Psychology, University of Western Ontario, Canada
Supervisor Dr. Joan Finegan

- **Visiting Research Stay with Dr. Tara Reich** **June 2019-Sept 2019**
  Surrey Business School, Guildford, United Kingdom

Bachelor of Arts (B.A. Honours) **2016**
Psychology, University of Guelph, Canada

RESEARCH INTERESTS

- **Workplace Mistreatment**
- **Performance Management**
- **Applicant Faking**
- **Leadership Character**
- **Leader Development**

MERIT-BASED SCHOLARSHIPS AND AWARDS

Joseph-Armand Bombardier Canada Graduate Doctoral Scholarship **($105,000)** **2021**
Social Sciences and Humanities Research Council of Canada (SSHRC)

Globalink Research Award **($6,000)** **2019**
Administered by Mitacs

Joseph-Armand Bombardier Canada Graduate Masters Scholarship **($17,500)** **2018**
Social Sciences and Humanities Research Council of Canada (SSHRC)

Entrance Scholarship **($2,000)** **2012**
Administered by University of Guelph

REFEREED PUBLICATIONS

Carver, **S. J.,** Goffin, R. D., & Factor, R. J. (2021). Relative and absolute self-ratings of work performance: Does social comparison lead to an enhanced thought process in self-evaluations? *International Journal of Selection and Assessment.* DOI:10.1111/ijsa.12351

WORKS IN PROGRESS

Carver, S. J., McCurrach, C. W. D., & Goffin, R. D (In preparation: Late stage). Should faking be reviled or revered in pre-employment personality testing? Target: *Journal of Personnel Psychology*

Factor, R. J., **Carver, S. J.,** Goffin, R. D.(In preparation: Late stage). Boundary conditions of negative feedback acceptance. Target: *Journal of Personnel Psychology*.

Carver, S. J. & Finegan, J. E. (In preparation: Late stage). Too many constructs in the kitchen: Towards a new measure of workplace mistreatment. Target: *Journal of Applied Psychology.*

Late stage = Analyses & write up in progress

REFEREED CONFERENCES

Carver, S. J. & Finegan, J. E. (2022, July). Too many constructs in the kitchen: Toward a unitary measure of workplace mistreatment. Presentation given at the European Academy of Occupational Health Psychology Conference in Bordeaux, Fr.

Carver, S. J., Reich, T. C., Dhensa-Kahlon, R. K., & Finegan, J. E. (2022, April). Is she rude or just assertive: How gender impacts third-party reactions to incivility. Poster presented at the Society for Industrial Organizational Psychology in Seattle, Was.

***Carver, S. J.,** Reich, T. C., Dhensa-Kahlon, R. K., & Finegan, J. E. (2021, April). Rudeness is in the eye of the beholder: Third-party reactions to witnessed incivility. Poster presented at the Society for Industrial Organizational Psychology in New Orleans, LA.

***Carver, S. J.,** Goffin, R. D., & McCurrach, C. W. D. (2021, April). Should faking be reviled or revered in pre-employment personality testing? Poster presented at the Society for Industrial Organizational Psychology in New Orleans, LA.

***Carver, S. J.**, & Finegan, J. E. (2020, July). Witnessing incivility: What predicts observer perspective-taking? Poster presented at the meeting for Canadian Psychological Association in Montreal, QC.

Carver, S. J., Braham, J., Hotchkiss, L. R., & Gonzalez-Morales, M. G. (2019, June). Us Too: Student perceptions of gender discrimination at work before, during, and after 'Me Too'. Poster presented at the meeting for Canadian Psychological Association in Halifax, N.S.

Carver, S. J., Goffin, R. D., & Factor, R. (2019, May). Relative and absolute self-ratings of work performance: Does social comparison lead to an enhanced thought process in self-evaluations? Poster presented at the meeting for Association for Psychological Science in Washington, D.C.

Carver, S. J., & Finegan, J. E. (2019, April). Reactions to incivility at work: Gender of the instigator, target, and observer. Poster presented at the meeting for the Society for Industrial Organizational Psychology in Washington, D.C.

Carver, S., McLean, K., Barrios-Sanchez, P., Dreger-Smylie, C., Sasso, T., & Gonzalez-Morales, M. G. (2015, June). Present, but not accounted for at work: Mental health presenteeism and instigated incivility. Poster presented at the Canadian Psychological Association Convention, Ottawa, ON.

Dreger-Smylie, C., Barrios-Sanchez, P., McLean, K., **Carver, S.**, Sasso, T., & Gonzalez-Morales, M. G. (2015, June). Attached or Trapped? Predicting Organizational Commitment in Religious Workers. Poster presented at the Canadian Psychological Association Convention, Ottawa, ON.

** Moved online due to the COVID19 pandemic*

INVITED PRESENTATIONS

Carver, S. J. (2023, April). Too many constructs in the kitchen: Toward a new measure of workplace mistreatment. Presentation given at Brescia University College in London, ON.

TEACHING AND RESEARCH ROLES

Limited Duties Appointment – University of Western Ontario

- Using Psychology to Manage and Measure Employee Work Performance **2023; 2024**
- Teams and Work Groups in Organizations **2023**

Teaching Assistant – University of Western Ontario

- Introduction to Industrial and Organizational Psychology **2019; 2021**
- Introduction to Psychology **2020**
- Using Psychology to Manage and Measure Employee Work Performance **2019**
- Introduction to Research Methods **2017-2018**

Research Supervisor – University of Western Ontario (PI: Dr. Riley Hinson)
Supervised Brendan Costello's undergraduate independent study project **2019- 2020**

Research Assistant

- PI: Dr. Richard Goffin – performance management and applicant faking **2018-Present**
- PI: Dr. Natalie Allen – impact of context on team functioning **2019-2020**
- PI: Dr. Harjinder Gill – trust in virtual teams **2015-2016**
- PI: Dr. Leanne Son Hing – perceptions of income inequality **2015-2016**
- PI: Dr. M. Gloria Gonzalez-Morales – perceptions of gender discrimination **2014-2016**

AD-HOC EDITORIAL SERVICE

European Journal of Work and Organizational Psychology	**2022-2023**
International Journal of Selection and Assessment	**2022-2023**
Journal of Business Ethics	**2020-2023**
Human Resource Management	**2020**
Canadian Psychological Association Convention	**2020**
Society for Industrial and Organizational Psychology Convention	**2019-2020**

AD-HOC CONSULTING EXPERIENCE

Centre of Hope London	**2020**
St. Joseph's Health Care London	**2020**

PROFESSIONAL EXPERIENCE

SIGMA Assessment Systems – Research & Development Intern	**Sept. 2020-Feb. 2023**

PROFESSIONAL AFFILIATIONS

- Society for Industrial Organizational Psychology (SIOP)
- Canadian Psychological Association (CPA)

VOLUNTEER ROLES

Student Reviewer for the Neuroscience Graduate Program at Western University	**2021-2022**
Co-chair of UWO I-O Psychology Website Committee	**2018-2022**
Co-chair of UWO I-O Psychology Brown Bag Committee	**2018-2021**
Co-chair of the 2018 I-O/OB Southwestern Ontario Student Conference	**2018**

GRADUATE LEVEL TRAINING

- Person-Centered Analyses
- Multilevel Modeling
- Structural Equation Modeling
- Research Design and Statistical Modeling
- Research Methods
- Work Groups and Teams
- Work Attitudes and Behaviour
- Recruitment and Selection
- Performance Management
- Leadership and Motivation
- Status and Power