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Short research note

Sensitivity to interpersonal treatment in the workplace: Scale development and initial validation

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The authors designed the sensitivity to interpersonal treatment (SIT) scale to assess how strongly individuals react to the interpersonal interactions in their workplaces. Questionnaire responses from 563 working undergraduates and 446 working adults provided data for this study. Details on the development of the new scale are provided along with initial evidence for its validity. Results indicated that the SIT is an internally consistent scale composed of two factors: self-treatment and other-treatment. Suggestions for future research that will develop a further understanding of SIT in the workplace are discussed.

The interpersonal interactions that an employee both experiences directly and observes indirectly form an important facet of any work environment. For instance, it has been shown that indirect exposure to sexual harassment has similar outcomes as direct exposure that include low job satisfaction and high degrees of psychological distress (Glomb *et al.*, 1997).

Unexplored by previous researchers, however, is whether employees are differentially sensitive to interpersonal interactions. We define sensitivity as the strength of one's cognitive and affective responsiveness to interpersonal encounters. For example, cognitively, one may ruminate about a supervisor's rude remark and affectively may become upset by this rudeness. Such sensitivity, in turn, may negatively affect a worker's job attitudes.

The purpose of this research is to develop a measure of sensitivity to interpersonal treatment (SIT) in the workplace. We begin by delineating SIT's nomological network, detailing why a new construct and associated measure is needed.

Conceptualizing sensitivity to interpersonal treatment

Given that we define sensitivity as the strength of one's cognitive and affective responsiveness to interpersonal encounters, it is not simply being aware of interpersonal

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treatment that marks high sensitivity; one must be aware of *and* react strongly to these encounters. SIT is thus conceptualized as an individual difference variable that classifies workers by how sensitive they are to different types of everyday interpersonal interactions. Because such sensitivity may be affected by one's environment, we do not necessarily conceptualize SIT as a stable personality trait.

Within the psychological literature, the importance of sensitivity in understanding interpersonal phenomenon is not new. Within clinical psychology, the term 'interpersonal sensitivity' is used to denote a tendency to feel self-conscious with others (Derogatis & Spencer, 1983). Social psychologists also use the term 'interpersonal sensitivity' to refer to an individual's ability to decode non-verbal social cues (e.g., Hall, 1987). Closer to this study, other conceptualizations of sensitivity come from the organizational justice literature – namely, equity sensitivity (Huseman, Hatfield, & Miles, 1987) and sensitivity to befallen injustice (SBI; Schmitt, 1996).

Equity sensitivity theory (Huseman *et al.*, 1987) argues that individuals differ in their reactions to situations of inequity–situations in which they perceive an imbalance between the ratio of what they give to and receive from an organization and what a comparable co-worker gives to and receives from the organization. Some are comfortable with situations in which their own ratio of outcomes/inputs is less than that of comparable co-workers, some want the ratios to be equal, and some are comfortable with situations in which their own ratio of outcomes/inputs is greater than that of comparable co-workers. Extending this further, Schmitt's (1996) SBI considers both distributive and procedural justice research. Although related to these two sensitivity constructs, SIT differs by considering a wider range of interpersonal situations that include everyday encounters with both supervisors and co-workers.

The questions remains: why is a new construct and associated measure needed? Recently, there has been increased interest in individual difference variables related to workplace interpersonal treatment (e.g., the role of perpetrator power and gender in understanding incivility experiences; see Pearson, Andersson, & Porath, 2005, for a review). However, the focus of this work has been on *general* individual difference constructs, which is possibly due to the lack of an individual difference construct that is *specific* to workplace interpersonal treatment. Ajzen and Fishbein (1977) argued that predictors (attitudes) and outcomes (behaviours) should match in specificity. We thus argue that the new construct of SIT nicely fills the need to align interpersonal experiences at work with an individual difference construct that is specific to these experiences.

Validity evidence

To build the nomological net surrounding SIT, we examined its relationship with other theoretically similar variables. First, given that both SIT and SBI (Schmitt, 1996) refer to sensitivity to social situations of one kind or another (everyday interpersonal encounters or in the context of distributive/procedural justice, respectively), the two constructs should be related. We also wish to show that SIT and SBI are independent constructs. We thus also hypothesize that the two are empirically distinct.

Hypothesis 1a: Scores on the SIT will be positively correlated with scores on the SBI.

Hypothesis 1b: The SIT items and the SBI items will be empirically distinct.

Next, SIT is theoretically similar to empathy which has been broadly defined as ' . . . reactions of one individual to the observed experiences of another' (Davis, 1983, p. 113). The empathic concern dimension of empathy defined by Davis, which focuses on feelings of concern for the misfortune of others, seems to be the most relevant to the current study as this dimension has been found to be related to emotionality by Davis and others (e.g., Eisenberg *et al.*, 1991). The common thread between empathy and SIT seems to be a heightened sense of emotional reactivity as those who are high in SIT tend to react strongly, either cognitively or, more importantly here, affectively, to interpersonal encounters; it therefore follows that scores on the SIT and empathy should be related. Again, as above, we wish to demonstrate that SIT and empathy are independent constructs.

Hypothesis 2a: Scores on the SIT will be positively correlated with empathy.

Hypothesis 2b: The SIT items and the empathy items will be empirically distinct.

Further, the relationship between SIT and perceptions of fair interpersonal treatment (PFIT; Donovan, Drasgow, & Munson, 1998) can provide additional evidence for the discriminant validity of the SIT. Because items for the SIT were constructed by using components of the PFIT items (as described shortly), the two constructs could be related to one another simply due to measurement error. However, the two constructs are theoretically distinct: simply perceiving that workers are being treated fairly (PFIT) is different from how one typically reacts to that treatment (SIT). The first entails perceived behaviours; the second refers to *reactions to* those perceived behaviours. We thus hypothesize that the two constructs will be empirically distinct.

Hypothesis 3: The SIT items and PFIT items will be empirically distinct.

Summary

In sum, the aim of this research is to develop a scale that measures SIT as we have conceptualized it and provide initial evidence for its validity. To this end, this research will: (1) explore the factor structure and the psychometric properties of the SIT measure and (2) begin to establish evidence for the validity of the SIT.

Method

Participants

Sample 1 consisted of 563 undergraduates who worked at least part-time for at least 4 of the previous 12 months and completed our survey for course credit. Fifty-three percent worked at least part-time for at least 9 of the previous 12 months; 49% were employed at least part-time at the time of the survey, and, of these, 41% were working at their job for more than a year. Participants were 17–43 years old (mean = 18.5), 67% were female and 87% were Caucasian.

Sample 2 consisted of 647 working adults who were recruited via an on-line service (The StudyResponse Project, 2007) that maintains a database of individuals willing to participate in web-based surveys. A random sample of 1,500 workers was drawn, stratifying on age, sex, and ethnicity according to the 2000 USA census statistics (U.S. Census Bureau, 2001). Participation incentives included one $500 cash prize and two

$250 cash prizes. Six hundred and forty-seven people responded, yielding a 43% response rate. The final, useable sample was comprised of 446 individuals who provided adequate data and worked full-time. Of these, 48% were female and 87% were White; they were 16–65 years old (mean = 36.6) and had an average of 5.7 years of tenure in their jobs, which included management, healthcare, sales, and education.

SIT item development

Item development was grounded in two existing scales. Positive/negative and co-worker/supervisor treatment language was borrowed from the PFIT scale (Donovan *et al.*, 1998; e.g., 'Employees are trusted' as positive-supervisor and 'Coworkers put each other down' as negative-co-worker). Sensitivity towards one's own or others' situations was borrowed from Schmitt's (1996) SBI measure. In addition, also borrowed from Schmitt (1996), items varied based on whether the impact of the situation was cognitive (e.g., 'it stays on my mind') or affective (e.g., 'it makes me upset'; i.e., was sensitivity defined as a cognitive or affective response). Thus, SIT items were created by crossing the following four points, yielding 16 categories of items (e.g., self-supervisor-positive-affective, other-co-worker-negative-cognitive):

(1) Does the situation occur to SELF or OTHERS?
(2) Is the treatment from a SUPERVISOR or COWORKER?
(3) Is it the treatment POSITIVE or NEGATIVE?
(4) Is sensitivity defined as an AFFECTIVE or COGNITIVE response?

We initially wrote two items for each category, for a 32-item measure. For example, we edited a 'positive-supervisor' PFIT item 'Employees are trusted' to create 'I value being trusted by my supervisor' to reflect an event occurring to oneself (self), initiated by one's supervisor (supervisor), and indicating an affective response (affective) to a positive event (positive). The response scale was a seven-point Likert scale (1 = 'Strongly Disagree' to 7 = 'Strongly Agree').

Additional instrumentation and procedure

Both samples completed surveys on-line. All constructs were measured with acceptable internal consistency, as seen in Tables 2 and 3, which also includes scale descriptive statistics, number of items, response scales, and correlations among variables examined within each sample. Sample 1 completed the SBI (Schmitt, 1996) to assess reactivity to unfair situations that are: (1) to other's advantage and one's own disadvantage, (2) to other's disadvantage, and (3) to one's own advantage and other's disadvantage. Both samples completed Davis' (1983) empathic concern subscale of the Interpersonal Reactivity Index. Finally, Sample 2 completed the PFIT scale (Donovan *et al.*, 1998), which is designed to assess workers perceptions of how employees are treated by co-workers and supervisors.

Results

Psychometric assessment of SIT items

We explored the underlying factor structure of the SIT via a rational-empirical process. Beginning with Sample 1, a principal components analysis (PCA) with promax rotation

Table 1. Sensitivity to interpersonal treatment measure

Item	*M*	*SD*	Focus	Source	Valence	Response
I would remember when my supervisor treats me with respect	6.47	0.84	S	Sup	Pos	Cog
It makes me angry if my supervisor lies to me	6.44	1.04	S	Sup	Neg	Aff
If my co-workers trust me, it stays on my mind	5.86	1.21	S	Cow	Pos	Cog
I would remember when my co-workers lie to me	6.17	1.03	S	Cow	Neg	Cog
If my supervisor appreciates my co-workers' hard work, it stays on my mind	5.47	1.28	O	Sup	Pos	Cog
It is upsetting to me if my supervisor yells at my co-workers	5.58	1.38	O	Sup	Neg	Aff
It is important to me that my co-workers trust each other	6.09	1.02	O	Cow	Pos	Aff
If my co-workers do not treat each other with respect, it stays on my mind	5.66	1.27	O	Cow	Neg	Cog

Note. Items used a seven-point Strongly Disagree/Strongly Agree response scale. Means (*M*) and standard deviations (*SD*) are from the full working professional sample ($N = 446$). S, self; O, other; Sup, supervisor; Cow, co-worker; Pos, positive; Neg, negative; Aff, affective response; Cog, cognitive response.

(an oblique rotation; following from Fabrigar, Wegener, MacCallum, & Strahan (1999)) accounted for 50% of the variance among the 32-item SIT and separated other-treatment from self-treatment items, indicating a two-factor solution: SIT–other ($\alpha = .95$) and SIT–self ($\alpha = .91$). Given that our goal was to develop a measure that is short enough for practical use while still retaining the best functioning items that cover the specified content domain, we then followed a two-step process of item reduction, first reducing the item pool from 32 to 16 items and second from 16 to 8 items. Following from Comrey and Lee (1992) and Tabachnick and Fidell (2001), we eliminated items that had factors loadings of .32 or below. As suggested by Nunnally and Bernstein (1994), we then utilized the rational criteria of item content and variety to eliminate additional items. More specifically, we sought to create a measure that contained an equal number items from each of the four major content categories (i.e., self-supervisor, self-co-worker, other-supervisor, and other-co-worker). To retain item variety, within each of the two factors (self and other), at least one item referred to a cognitive and an affective response and at least one item referred to a positive and a negative interpersonal situation.

The final set of eight items is shown in Table 1. To make certain the item reduction process had not affected the underlying factor structure, a two-factor (self and other) confirmatory factor analysis was specified. This model showed reasonable fit ($\chi^2(19) = 119.5$, $p < .01$; CFI = .994; RMSEA = .097;[1] RMR = .051)[2] and the reliabilities were also acceptable: SIT–other ($\alpha = .78$) and SIT–self ($\alpha = .70$). The correlation between the factors was .24. All subsequent analyses utilized this eight-item version.

We then confirmed the eight-item factor structure in Sample 2. The model fit the data reasonably well ($\chi^2(19) = 122.7$, $p < .01$; CFI = .992; RMSEA = .111; RMR = .060),

[1] *It has been suggested that a RMSEA of less than .10 is adequate (Tabachnick & Fidell, 2001).*

[2] *In order to explore the possibility that we reduced the number of items in our measure too drastically, we also ran a CFA testing the fit of a 16-item version of our measure and the fit statistics were worse in the 16-item version as compared to the 8-item version in both samples. Results of these analyses are available from the first author.*

Table 2. Correlations, descriptives, and alpha reliabilities for all study variables: Sample 1

	No. of items	Resp. scale[a]	*M*	*SD*	1	2	3	4	5	6
1. SIT – self	4	7pt A-D	24.92	2.48	(.70)					
2. SIT – other	4	7pt A-D	20.97	3.79	.58**	(.78)				
3. SBI – oth. ad./slf. dis.	10	7pt A-D	49.30	8.55	.30**	.22**	(.84)			
4. SBI – oth. dis.	10	7pt A-D	49.01	8.03	.36**	.45**	.48**	(.87)		
5. SBI – oth. dis./slf. ad.	10	7pt A-D	43.11	10.54	.24**	.42**	.09*	.58**	(.91)	
6. Empathy	7	5pt Acc.	27.25	4.64	.32**	.39**	−.02	.46**	.50**	(.80)

Note. SIT, sensitivity to interpersonal treatment; SBI, sensitivity to befallen injustice, Oth., other; Ad., advantage; Slf., self; Dis., disadvantage; alpha reliabilities are listed along diagonal in parentheses; $N = 548$; $*p < .05$; $**p < .01$ (one-tailed).

[a] Response scale abbreviations: 7pt A-D, seven-point response scale with 'Strongly Disagree' and 'Strongly Agree' as item anchors; 5pt Acc, five-point response scale with 'Very Inaccurate' to 'Very Accurate' as item anchors.

again supporting a two-factor solution: SIT-other ($\alpha = .82$) and SIT-self ($\alpha = .72$). The correlation between the factors in this sample was .34.

Hypothesis testing

Hypothesis 1a was supported in that both SIT factors were significantly correlated with the three SBI factors (see Table 2). The effect sizes of these correlations, however, were not extremely large (r^2 values ranging from .05 to .20) suggesting that the two measures represent separate constructs. Additionally, Hypothesis 2a was supported in that both SIT factors were positively correlated with empathy in both samples (see Tables 2 and 3).

Hypotheses 1b, 2b, and 3 stated that the SIT would be empirically distinct from the SBI, empathy, and PFIT, respectively. To test Hypotheses 1b and 2b, we conducted a confirmatory factor analysis with Sample 1 specifying four latent constructs (SIT-self, SIT-other, SBI, and empathy). The model fit the data reasonably well ($\chi^2(71) = 422.08$, $p < .01$; CFI = .988; RMSEA = .094; RMR = .077), supporting the idea that SIT is empirically distinct from SBI and empathy.

Table 3. Correlations, descriptives, and alpha reliabilities among all study variables: Sample 2

	No. of items	Resp. scale[a]	*M*	*SD*	1	2	3	4
1. SIT – Self	4	7pt A-D	24.87	3.00	(.72)			
2. SIT – Other	4	7pt A-D	22.80	4.02	.57**	(.82)		
3. Empathy	7	5pt Acc.	26.70	4.86	.21**	.33**	(.83)	
4. PFIT	12	Yes ? No	27.06	7.08	.00	.06	.06	(.91)

Note. SIT, sensitivity to interpersonal treatment; PFIT, perceptions of fair interpersonal treatment; alpha reliabilities are listed along diagonal in parentheses; $N = 397$; $*p < .05$; $**p < .01$ (one-tailed).

[a] Response scale abbreviations: 7pt A-D, seven-point response scale with 'Strongly Disagree' and 'Strongly Agree' as item anchors; 5pt Acc, five-point response scale with 'Very Inaccurate' to 'Very Accurate' as item anchors; Yes ? No, three-point response scale with 'Yes', '?', and 'No' as item anchors.

To test Hypotheses 2b and 3, we conducted a confirmatory factor analysis with Sample 2 specifying four latent constructs (SIT–self, SIT–other, empathy, and PFIT). The model fit the data well ($\chi^2(71) = 156.24$, $p < .01$; CFI3 = .996; RMSEA = .055; RMR = .049), supporting the idea that SIT is empirically distinct from empathy and PFIT. It should also be noted that Table 3 reveals that neither of the SIT factors was significantly correlated with PFIT. Thus, the testing Hypotheses 1b, 2b, and 3 provide evidence for the discriminant validity of SIT.

Discussion

This study introduced a new construct and its associated measure: SIT in the workplace. The results demonstrated that the SIT is an internally consistent measure that can be used to assess how workers react to the various forms of interpersonal treatment that can occur everyday in the workplace. Further, the SIT is comprised of two factors: sensitivity to interpersonal encounters that occur to oneself (SIT–self) and to someone else (SIT–other). Evidence for convergent and discriminant validity of SIT was provided. Future research can build upon this current study by investigating other correlates of SIT, including personality and situational correlates, and by demonstrating its theoretical utility by examining the potential moderating impact it may have. Cognitive appraisal theory (Lazarus, 2001; Lazarus & Folkman, 1984) suggests that environmental and personal factors interact to predict cognitive reactions. Following from this, SIT, as a potential personal or situational factor, may moderate the relationship between negative interpersonal experiences at work and relevant outcomes. Future research can also provide further evidence for the validity of SIT given that the current research is not without its limitations including the somewhat marginal fit of our models.

In conclusion, this study is an important step forward for research investigating interpersonal encounters at work. By raising awareness that sensitivity to interpersonal treatment exists as an individual difference variable, it is our hope that such awareness breeds greater feelings of respect in today's fast-paced workplace.

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