

# Self-Defeating Behaviors in Organizations: The Relationship Between Thwarted Belonging and Interpersonal Work Behaviors

Stefan Thau  
London Business School

Karl Aquino  
University of British Columbia

P. Marijn Poortvliet  
University of Groningen

This multisource field study applied belongingness theory to examine whether *thwarted belonging*, defined as the perceived discrepancy between one's desired and actual levels of belonging with respect to one's coworkers, predicts interpersonal work behaviors that are self-defeating. Controlling for demographic variables, job type, justice constructs, and trust in organization in a multilevel regression analysis using data from 130 employees of a clinical chemical laboratory and their supervisors, the authors found that employees who perceive greater levels of desired coworker belonging than actual levels of coworker belonging were more likely to engage in interpersonally harmful and less likely to engage in interpersonally helpful behaviors. Implications for the application of belongingness theory to explain self-defeating behaviors in organizations are discussed.

*Keywords:* belonging, helping behaviors, interpersonal deviance, self-defeating behaviors, social exclusion

The need for belonging is among the most powerful sources of human motivation (Baumeister & Leary, 1995; Maslow, 1943), and the desire for its fulfillment is perhaps why many employees often prefer to work in groups rather than alone (Alderfer, 1972), why they cooperate with others (Kramer, 1993), and why they refrain from engaging in actions that harm their coworkers (Hollinger & Clark, 1982). The importance of belonging in people's lives is also evidenced by the fact that when this need is thwarted, it can lead to depression, sadness, and lowered self-esteem (see Baumeister, Twenge, & Ciarocco, 2002, for an overview). In this article, we explore another possible consequence of thwarted belongingness needs by testing whether employees who experience a deficit between their desired and actual levels of coworker belonging will exhibit more interpersonally harmful and fewer helping behaviors. We argue that because these behaviors are, in the long run, likely to increase rather than decrease the gap between desired and actual belonging, they can be described as *self-defeating* (Baumeister & Scher, 1988; Blackhart, Baumeister, & Twenge, in press).

The idea that employees sometimes behave in ways that can prevent them from satisfying their desires, interests, or goals is not new. The managerial decision-making literature has demonstrated

that managers often deviate from the prescriptions of rational choice. Rather, they behave in ways that prevent them from maximizing their outcomes and satisfying their presumed goal of gain maximization (see Bazerman, 2002, for an overview). Baumeister and Scher (1988) suggested that such decision-making biases are self-defeating behaviors because they undermine the decision maker's goals.

In contrast to the literature on decision making, no previous study in organizational psychology has, to our knowledge, examined whether employees' interpersonal behaviors may also be interpreted as self-defeating. Many prominent theories in organizational (e.g., social exchange theory, goal-setting theory; see DeShon & Gillespie, 2005, for an overview) and social (e.g., Carver & Scheier, 1981) psychology assume that employee behavior is driven by a mostly rational effort to achieve desired goals, that is, they compare desired goals to actual states and then pursue actions to resolve any perceived goal-state discrepancy (Carver & Scheier, 1981). The idea that we tested departs from rational models of employee behavior because it suggests that the experience of desiring closer relationships with coworkers than one actually has can produce a psychologically unpleasant experience of *thwarted belonging*. In turn, this experience can sometimes activate psychological processes that make employees pursue short-term goals that can prevent them from reducing the desired-actual belongingness gap. We base this idea on social psychological theory and research suggesting that thwarted belonging can lead to self-regulation failures that result in self-defeating behaviors (Blackhart et al., in press). We argue that one example of this phenomenon in organizations is when an employee who experiences thwarted belonging exhibits interpersonal behaviors that, in the long run, are likely to contribute to further social isolation (Blackhart et al., in press; Twenge, Baumeister, Tice, & Stucke, 2001).

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Stefan Thau, Organizational Behavior Subject Area, London Business School, London, England; Karl Aquino, Organizational Behavior and Human Resources Division, Sauder School of Business, University of British Columbia, Vancouver, Canada; P. Marijn Poortvliet, Department of Social and Organizational Psychology, University of Groningen, Groningen, the Netherlands.

Correspondence concerning this article should be addressed to Stefan Thau, Organizational Behavior Subject Area, London Business School, Regent's Park, London NW1 4SA, England. E-mail: sthau@london.edu

No study can examine all possible self-defeating behaviors; therefore, we limited our focus to behaviors directed toward coworkers because the theory of belongingness from which we derived our predictions is fundamentally about interpersonal relationships. Consequently, we expected thwarted belonging to have its strongest and most visible impact on behaviors that occur in the context of these relationships.

### Theoretical Background and Hypotheses

A common sense strategy for closing a desired–actual belongingness gap with one’s coworkers is to behave in ways that would make one more attractive or likable. For example, an employee who experiences thwarted belonging could try to be more helpful and accommodating to fellow employees, thereby enhancing his or her social desirability. These behaviors convey a willingness to cooperate with others, make sacrifices on their behalf, and act respectfully during social interaction (Van Lange et al., 1997). Over time, people should treat the helpful employee more positively (and less negatively) on the basis of the principle of reciprocity (Aquino & Bommer, 2003; Gouldner, 1960).

What we propose here, however, is that thwarted belonging can sometimes prevent employees from exhibiting the very behaviors that would help them to reduce a desired–actual belongingness gap. Laboratory studies have shown that people who are socially excluded—and who thereby have their belongingness needs thwarted—are, paradoxically, more aggressive (Twenge et al., 2001) and less prosocial (Twenge, Ciarocco, Cuervo, Bartels, & Baumeister, 2005) than those who are socially included. These behaviors are self-defeating because they are likely to lead to further social exclusion (Coie, 1990; Dodge, 1983), thereby producing a persistent aversive experience for the person needy of belonging (Blackhart et al., in press). But why would people whose belongingness needs are thwarted behave in ways that make them less rather than more socially attractive? We apply belongingness theory to answer this question.

Belongingness theory assumes that people have a fundamental need to maintain high-quality relationships with others (Baumeister & Leary, 1995). Consequently, when their belongingness needs are thwarted, people react adversely to it because the satisfaction of a fundamental need has been denied. It has also been argued that thwarted belonging can create barriers for long-term goal accomplishment by impairing the self-regulation of socially appropriate behaviors (Blackhart et al., in press). Among the behaviors that can impede the attainment of the long-term goal of gaining social acceptance are acts that cause harm to others (i.e., aggression) or that demonstrate a lack of responsiveness to their needs. Two psychological mechanisms from belongingness theory—ego-depletion and identity threat—can explain why thwarted belonging can motivate these types of self-defeating behaviors (cf. Blackhart et al., in press).

*Ego depletion* occurs when a person devotes mental and emotional effort to processing, interpreting, and understanding the causes and implications of being socially excluded. Baumeister, DeWall, Ciarocco, and Twenge (2005) found support for this mechanism by showing that social exclusion leads to suboptimal performance on tasks that require a long-term, rational focus, such as eating healthy but not so tasty foods. Instead, they found that people who felt socially excluded were more likely to eat un-

healthy but pleasant-tasting foods. Whereas such behavior might satisfy their short-term goal of satisfying their craving for a certain type of food, it compromises the longer term goal of maintaining a healthy diet.

*Identity threat* results from receiving negative information about the self, which the experience of thwarted belonging can convey. Such information can undermine a person’s belief that he or she is socially valued. It has been suggested that one consequence of an identity threat is that it sometimes leads people to aggress against the perceived source(s) of threat as a short-term solution to validating the self (Baumeister, Smart, & Boden, 1996). Aquino and Douglas (2003) provided support for this argument by showing that employees who reported experiencing more frequent identity threats from coworkers also reported engaging in higher levels of antisocial work behaviors directed toward others. It is conceivable that aggressive responses to identity threat are driven more by a short-term desire to validate the self and to vent a heightened, but temporary, emotional state of anger rather than by a deliberate, long-term strategy for increasing one’s social attractiveness (Crocker & Park, 2004). Thus, such a response could be construed as behaviorally self-defeating in the long run.

A third reason why thwarted belonging should predict self-defeating behaviors is that an employee’s work group is an important source of feedback about how he or she is expected to behave. When an employee is not well integrated into the group, one consequence is that he or she will have less access to social information about what behaviors other group members consider appropriate (Seashore, 1954). In support of this argument, behavioral feedback from coworkers has been shown to predict helping behavior (Rosen, Levy, & Hall, 2006). By extension, it is reasonable to predict the opposite: Lack of feedback will also predict interpersonally harmful behaviors.

On the basis of the theoretical mechanisms described above and the empirical evidence supporting these mechanisms, we argue that there are good reasons for expecting thwarted belonging to create psychological barriers to closing the desired–actual belongingness gap. The following hypotheses test these arguments:

*Hypothesis 1:* The greater the discrepancy between an employee’s desired and actual states of belonging such that the actual state falls short of the employee’s desired state, the more likely the employee is to exhibit interpersonally harmful behaviors.

*Hypothesis 2:* The greater the discrepancy between an employee’s desired and actual states of belonging such that the actual state falls short of the employee’s desired state, the less likely the employee is to exhibit interpersonally helpful behaviors.

### Method

#### *Participants and Procedure*

We examined the relationship between the experience of thwarted belonging and interpersonal work behaviors in a multi-source field study. Respondents were from a Dutch clinical chemical laboratory. In Part 1 of the study, we measured self-reports of actual and desired belonging and several control variables. We mailed this survey to employees’ homes and provided a stamped envelope to return the material. We encouraged participation

through organizational newsletters, the employees' union, and the management of the organization. We assured all respondents that their responses would be treated confidentially and that only aggregated data would be used as feedback to their organization. All material was written in Dutch. From a total of 482 employees, 213 employees responded, for a response rate of 44%. The number of usable employee surveys was 200. In Part 2, we mailed employees' supervisors a survey and asked them to rate their employees' engagement in interpersonal deviance (Bennett & Robinson, 2000) and helping behaviors (Van Dyne & LePine, 1998). We encouraged participation by calling supervisors at work and assured them of the confidentiality of their responses.

For a total of 482 employees, we received 329 ratings from 16 supervisors (who, on average, rated 20.56 employees; range = 3–32), for a response rate of 68% per employee. Two supervisors did not respond to our survey. We obtained matched responses on all study variables for 129 employees. We used code numbers to match employee-supervisor responses and not their names to reduce response threat. Eighty-eight percent of the employees for whom we had complete data were women. Their ages ranged from 22 to 69 years ( $M = 41.66$ ,  $SD = 9.15$ ), and their organizational tenure ranged from 0 to 41 years ( $M = 16.16$ ,  $SD = 10.53$ ). Ten of these employees held administrative functions, 41 had medical but nonskilled jobs (e.g., helping nurses and analysts' assistants), and the remaining 78 had medical and skilled jobs (e.g., physicists, professional nurses, and professional analysts). We obtained information on employee age, tenure, gender, and job type from company records.

### Measures

*Actual and desired belonging.* We assessed actual and desired belonging by presenting respondents with two versions of the Inclusion of Other in the Self Scale (IOS; Aron, Aron, & Smollan, 1992). The IOS is a graphic, one-item scale that assesses the extent to which people feel that their self overlaps with another person, group, or any other social entity. According to belongingness theory (Baumeister & Leary, 1995), people cognitively represent close relationships in terms of self-other overlap. Other versions of this scale have been shown to validly capture *coworker identification* (Shamir & Kark, 2004), which Ashforth and Mael (1989), consistent with our theoretical focus, defined as the perception of oneness and belonging to a social aggregate.

Our adaptations of the inclusion of the IOS measure consisted of two sets of seven pictures, with two circles indicating increasing degrees of overlap between the self and one's colleagues. We titled this section of the questionnaire "Relationships in the Department" to provide employees with an accurate frame of reference for reporting self-other overlap. We assessed the discrepancy between employee's actual and desired state of belonging with respect to colleagues by asking them to indicate which picture represented best the relation they have with their colleagues at this moment (*actual belonging*). The instructions told respondents that they should think about their relationship with colleagues in general rather than with a particular colleague. We next told participants, "The closer you feel you relate to your colleagues, the more the circles overlap." Beneath the first set of seven circles, we showed respondents the same set of circles and asked which picture best captured the kind of relationship they desired to have

with their colleagues (*desired belonging*). We explicitly instructed participants to choose the same set of circles if their actual state of belonging equaled their desired state.

*Interpersonally harmful behaviors.* We assessed interpersonally harmful behaviors with Bennett and Robinson's (2000) Interpersonal Deviance Scale (seven items;  $\alpha = .89$ ). A sample item is "Cursed at someone at work." Supervisors indicated how often the employee engaged in each of the items on a 7-point scale (1 = *never*, 7 = *always*).

*Helping behaviors.* We assessed helping behaviors with Van Dyne and LePine's (1998) Helping scale (seven items;  $\alpha = .96$ ). A sample item is "Volunteers to do things for the team." Supervisors rated these items on a 7-point scale (1 = *never*, 7 = *always*).

We assessed the dimensionality of interpersonal work behavior items with confirmatory factor analysis. We compared two models. Model 1 was the hypothesized two-factor model, with items measuring harmful behaviors and helping behaviors loading on two separate correlated factors. Model 2 was the alternative model, with all items loading on a general factor. Model 1's fit was significantly better than Model 2's fit, as indicated by a significant  $\chi^2$ -difference test (1381.87,  $N = 327$ ,  $df = 1$ ,  $p < .001$ ) and better root-mean-square error of approximation (RMSEA; .10 vs. .31) and better comparative fit index (CFI; .94 vs. .59) values. Inspection of factor loadings in the hypothesized model showed that all items loaded greater than  $t > 7.16$  on their respective factors. These results suggest that interpersonally harmful and helping behaviors are separate constructs.

*Control variables.* We controlled for a number of constructs that have been theoretically or empirically linked to our dependent variables in past research. We controlled for perceptions of interactional and distributive justice, both of which have been shown to predict workplace deviance (Aquino, Lewis, & Bradfield, 1999; Skarlicki & Folger, 1997) and citizenship behaviors (Moorman, 1991). We assessed these variables with six interactional justice ( $\alpha = .91$ ) and four distributive justice ( $\alpha = .93$ ) items from Moorman (1991). Respondents answered using 5-point Likert scales (1 = *strongly disagree*, 5 = *strongly agree*). A sample item for the interactional justice measure is "My supervisor treats me in a friendly manner." A sample item assessing distributive justice is "I am rewarded fairly, considering my experience." We assessed employee perceptions of procedural justice of change, a variable that influences employee reactions to change (Brockner & Greenberg, 1990), because the focal organization was in the midst of a change initiative. This construct was measured with five modified items ( $\alpha = .80$ ) from Moorman (1991). A sample item is "Formal procedures are designed to provide useful feedback regarding the decision and its implementation" (1 = *strongly disagree*, 5 = *strongly agree*). We also controlled for trust in organization (Robinson, 1996) because trust has been shown to be a strong predictor of cooperation at work (Dirks & Ferrin, 2002). Seven items were answered on a 5-point Likert format (1 = *strongly disagree*, 5 = *strongly agree*;  $\alpha = .75$ ). A sample item is "I believe my employer has high integrity."

Finally, we controlled for employee age (measured in years), tenure (measured in years), sex (0 = female, 1 = male), and job type. We created three dummy variables to measure employee's job type, with the nonmedical jobs being the reference dummy variable in the regression analyses. We coded medical, nonskilled jobs in one additional job type dummy variable, and medical,

skilled jobs in a third job type dummy variable. We controlled for demographic variables because previous research has linked them to employee engagement in harmful behaviors (Aquino & Douglas, 2003). We controlled for job type because it may be that employees in nonmedical jobs, the numerical minority in our sample, may have a stronger desire to belong than employees who were in the more widely represented medical jobs.

We assessed the dimensionality of self-report control variables with confirmatory factor analyses. We compared three models. Model 1 was the hypothesized four-factor model, with items measuring interactional justice, distributive justice, procedural justice, and trust in organization on four separate correlated factors. Model 2 was an alternative model, with all justice items loading on one factor and the trust items on a separate factor. Model 3 was another alternative model, with all items loading on a general factor. Model 1's fit was significantly better than Model 2's and Model 3's fit, as indicated by significant  $\chi^2$  differences between Model 1 and Model 2 (743.56,  $N = 198$ ,  $df = 5$ ,  $p < .001$ ) and Model 1 and Model 3 (837.82,  $N = 198$ ,  $df = 6$ ,  $p < .001$ ). Model 1 also had better RMSEA and CFI values (.06 and .93, respectively) than Models 2 (.17 and .60, respectively) and 3 (.18 and .56, respectively). All items in Model 1 loaded greater than  $t > |4.871$  on their respective factors. These results suggest that the self-report control variables measure distinct constructs.

## Results

### Analyses

*Intraclass correlation of supervisor ratings.* We computed intraclass correlation coefficients (Donner, 1986) prior to analyzing the effects of thwarted belonging on interpersonally harmful and helping behaviors. This measure indicates the degree to which interpersonal work behavior ratings correlate within one supervisor. For interpersonally harmful behaviors, the intraclass correlation was  $\rho = .17$ ; for helping behaviors, it was  $\rho = .52$ . These two statistics indicate that the standard ordinary least squares regression analysis assumption of independent observations was violated by our data. We estimated a series of multilevel regression models (Snijders & Bosker, 1999) using the *xtmixed* option in STATA 9.0 (StataCorp, 2005) to account for the nonindependence of supervisor ratings. This procedure fits linear mixed models with fixed effects ( $\gamma$ s) analogous to regression coefficients on nested data (e.g., employees nested within supervisory units). We estimated a two-level model with employees nested within supervisors, using maximum likelihood estimation.

We calculated likelihood ratio tests to evaluate whether a set of variables significantly added to the explanation of interpersonally harmful and helpful behaviors. This test (as defined by a  $\chi^2$  difference based on the log-likelihood values) determines whether the fit of a model with more parameters is significantly better than the one with fewer parameters. We also computed the proportional reduction of prediction error at Level 1 when predictors were added to the model, which is analogous to  $R^2$  in multiple regression analysis (Snijders & Bosker, 1999). We centered all variables around their scale mean prior to analysis (except dichotomous variables) to minimize multicollinearity among the model components (Aiken & West, 1991; Edwards, 2001a).

*Difference score analysis.* We followed Edwards' (2001a) recommendations for the analysis of algebraic difference scores be-

cause our hypotheses focused on the discrepancy between desired and actual belonging. This procedure assumes that a proper test of an algebraic difference score (i.e., desired belonging – actual belonging) in regression-type analyses requires a test of an unconstrained regression equation in which the dependent variable is regressed on the components of the difference scores. If the model implied by the difference index is valid, then (a) adding the independent variables (actual belonging and desired belonging) to the model containing the control variables should increase model fit, (b) actual belonging and desired belonging should exhibit a significant independent effect on the dependent measure, (c) the coefficients of actual belonging and desired belonging should be opposite in sign and not different in magnitude, and (d) the results of the regression equation involving the thwarted belonging difference index (thwarted belonging = desired belonging – actual belonging) and the separate components of the index should lead to the same substantive conclusions.

*Supplemental analysis through polynomial regression analysis.* Edwards (2001a) proposed a second step in the analysis of difference scores that goes beyond the verification of the implied constraint through the difference index. This procedure consists of polynomial regression analyses. For these analyses, we entered a set of higher order terms in the regression equation to draw further conclusions about potential complexities in the data. Specifically, the polynomial regression analyses we conducted included the linear part, consisting of the control variables, actual belonging, and desired belonging, plus the nonlinear part actual belonging<sup>squared</sup>, desired belonging<sup>squared</sup>, and an Actual Belonging  $\times$  Desired Belonging interaction.

*Sensitivity check of data.* One problem with polynomial regression analyses is that their results may be unstable because polynomial terms are very sensitive to unusual sample variations on the predictor variables (Cohen, Cohen, West, & Aiken, 2003, p. 212). We followed Cohen et al. (2003) and calculated leverage statistics on polynomial regression models. This statistic indicates which cases have a very rare value on the predictor variables and thus exert an unusual leverage on the regression coefficients. According to Cohen et al. (p. 398), cases for which there is an extremely large gap in the leverage value from the remainder of leverage values should be considered rare cases that have an unusual leverage on the estimated regression coefficients. In our sample, there was one such case, which we excluded from all regression analyses.<sup>1</sup> Descriptive statistics for all variables in the model are shown in Table 1.

<sup>1</sup> Including this case in the linear model did not substantially change the results we report here. Including this case in the polynomial part, however, did produce significant model fit improvement for helping behaviors. We acknowledge that thwarted belonging is a low base rate phenomenon and, therefore, individuals who report on thwarted belonging are, almost by definition, unusual compared with the rest of the sample. However, because the model improvement in the polynomial part involving helping behaviors was driven by one single case that had an extreme gap in leverage values (Cohen et al., 2003), we decided to exclude this case from the presentation of our results.

Table 1  
Means, Standard Deviations, and Zero-Order Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Administrative job (0 = other job types)	.08	.27	—													
2. Unskilled medical job (0 = other job types)	.32	.47	-.20	—												
3. Skilled medical job (0 = other job types)	.60	.49	-.36	-.84	—											
4. Gender (0 = male)	.88	.33	.11	.26	-.30	—										
5. Employee age	41.66	9.15	.00	-.35	.33	-.12	—									
6. Employee tenure	16.16	10.53	-.20	-.29	.39	-.19	.70	—								
7. Interactional justice	3.67	.88	.02	-.25	.23	-.10	.13	.05	—							
8. Distributive justice	3.18	1.09	-.16	.05	.05	.14	.07	-.01	.40	—						
9. Procedural justice	3.05	.69	-.02	.03	-.02	-.03	.07	-.01	.36	.28	—					
10. Trust in organization	3.52	.65	-.05	.08	-.05	.02	.13	.02	.53	.40	.41	—				
11. Desired belonging	4.60	1.30	.07	-.02	-.01	.05	-.02	-.09	.13	.14	.17	.23	—			
12. Actual belonging	4.26	1.33	.12	-.19	.11	.04	.16	.07	.26	.19	.25	.32	.81	—		
13. Interpersonally harmful behaviors	1.15	.39	.19	.01	-.11	-.01	.01	.04	-.27	-.19	.02	-.09	-.02	-.16	—	
14. Helping behaviors	4.05	.93	-.05	-.18	.20	-.09	.27	.10	.13	.14	.15	.17	-.05	.13	-.24	—

Note.  $N = 129$ . Correlations greater than  $|\text{.28}|$  are significant at  $p < .001$ ; correlations greater than  $|\text{.20}|$  are significant at  $p < .01$ ; correlations greater than  $|\text{.17}|$  are significant at  $p < .05$ .

### Hypotheses Tests for Algebraic Difference Score Model

Table 2 shows the results of the hypotheses tests. We entered control variables and compared the fit of the regression model to an empty (intercept-only) model in Model 1. In Model 2, we entered desired belonging and actual belonging. The fit of Model 2 was compared with Model 1, including control variables only. As expected, the effects of desired belonging ( $\gamma = .10$ ,  $z = 2.17$ ,  $p < .05$ ) and actual belonging ( $\gamma = -.13$ ,  $z = 2.82$ ,  $p < .01$ ) on interpersonally harmful behaviors were opposite in sign and comparable in magnitude.<sup>2</sup> Moreover, the model containing actual belonging and desired belonging had a significantly better fit than the model containing control variables only,  $LR\chi^2(2, N = 130) = 7.78$ ,  $p < .05$ . These analyses support Hypothesis 1. We conducted additional analyses in which we regressed interpersonally harmful and helpful behaviors on an algebraic difference index (desired belonging – actual belonging). This analysis revealed a positive effect of the desired–actual belonging difference on interpersonally harmful behaviors ( $\gamma = .11$ ,  $z = 2.52$ ,  $p < .05$ ), which again supports Hypothesis 1. The effects of desired belonging ( $\gamma = -.24$ ,  $z = -2.79$ ,  $p < .01$ ) and actual belonging ( $\gamma = .19$ ,  $z = 2.15$ ,  $p < .05$ ) on interpersonally helpful behaviors were opposite in sign and comparable in magnitude. The model containing the actual belonging and desired belonging fit significantly better than the model containing control variables only,  $LR\chi^2(2, N = 128) = 7.68$ ,  $p < .05$ . The effect of the desired–actual belonging difference on helpful behaviors was negative ( $\gamma = -.22$ ,  $z = -2.58$ ,  $p < .05$ ). These results support Hypothesis 2.

The form of the relationship between thwarted belonging and the dependent variables is illustrated in Figure 1, which shows the relationship between the difference index and both interpersonally harmful and helping behaviors.

### Supplemental Polynomial Regression Analyses

Adding the squared terms of actual belonging and desired belonging, and the Actual Belonging  $\times$  Desired Belonging interac-

tion in the multilevel regression equation involving interpersonally harmful behaviors as dependent variable did not improve model fit,  $LR\chi^2(3, N = 130) = 4.43$ ,  $p = .22$ , nor did they improve model fit for helping behaviors,  $LR\chi^2(3, N = 128) = 4.96$ ,  $p = .17$ . According to Edwards (2001a), these results provide further support for Hypotheses 1 and 2 because they show that the data are consistent with the algebraic difference model (a linear model) rather than with an alternative model (a polynomial model).

### Discussion

The results of this study supported our prediction that thwarted belonging is associated with certain forms of self-defeating behaviors in organizations. As predicted, employees who perceived that their actual state of belonging with respect to their colleagues fell short of their desired level were reported by their supervisors as exhibiting more interpersonally harmful and fewer interpersonally helpful behaviors. We have argued that, in the long run, such behaviors are likely to make the employee less rather than more likely to reduce the desired–actual belongingness gap. It is for this reason that we describe them as behaviorally self-defeating. It is notable that we found that thwarted belonging explains unique variance in behavior over and above standard social exchange explanations such as justice and trust, which testifies to the potential usefulness of applying belongingness theory to predict both

<sup>2</sup> Extending Edwards' (2001a) procedure, we performed an additional statistical test to formally assess the hypothesis that the parameter estimate of desired belonging is comparable in magnitude to the parameter estimate of actual belonging. We did this by performing a Wald test on the null hypothesis: desired belonging = actual belonging. Consistent with the hypotheses, both for interpersonally harmful,  $\chi^2(1, N = 130) = 1.68$ ,  $p = .19$ , and for helping,  $\chi^2(1, N = 128) = 1.25$ ,  $p = .26$ , behaviors, this test was nonsignificant. The results of this test suggest that, whereas the signs of the parameters are opposite in sign, the size of the parameter estimates is about the same.

Table 2  
Multilevel Estimates of the Effect of Desired and Actual Belonging on Interpersonally Harmful and Helping Behaviors

Variable	Harmful behaviors				Helping behaviors			
	Model 1		Model 2		Model 1		Model 2	
	$\gamma$	CI	$\gamma$	CI	$\gamma$	CI	$\gamma$	CI
Constant	1.38***	1.03, 1.74	1.39***	1.05, 1.73	3.99***	3.21, 4.76	3.99***	3.23, 4.75
Unskilled medical staff (0 = other jobs)	-0.41*	-0.72, -0.09	-0.47**	-0.77, -0.16	0.18	-0.51, 0.86	0.27	-0.41, 0.94
Skilled medical staff <sup>a</sup> (0 = other jobs)	-0.23	-0.55, 0.08	-0.29	-0.59, 0.01	0.48	-0.22, 1.18	0.61	-0.08, 1.30
Gender (0 = male)	0.04	-0.16, 0.25	0.05	-0.15, 0.25	-0.22	-0.61, 0.17	-0.21	-0.59, 0.16
Age (years)	-0.00	-0.01, 0.01	-0.00	-0.01, 0.01	0.02	-0.00, 0.04	0.01	-0.01, 0.03
Tenure (years)	0.01	-0.00, 0.01	0.01	-0.00, 0.02	-0.02*	-0.03, -0.00	-0.02*	-0.04, -0.00
Interactional justice	-0.11*	-0.21, -0.02	-0.11*	-0.21, -0.02	0.03	-0.16, 0.21	0.02	-0.16, 0.19
Distributive justice	-0.04	-0.11, 0.03	-0.03	-0.10, 0.19	0.04	-0.08, 0.17	0.05	-0.07, 0.17
Procedural justice	0.08	-0.03, 0.18	0.09	-0.01, 0.18	0.01	-0.18, 0.20	0.03	-0.16, 0.21
Trust in organization	0.06	-0.07, 0.18	0.08	-0.04, 0.20	0.05	-0.18, 0.27	0.06	-0.17, 0.28
Desired belonging			0.10*	0.01, 0.19			-0.24**	-0.41, -0.07
Actual belonging			-0.13**	-0.23, -0.04			0.19*	0.02, 0.36
LR $\chi^2$ test		16.99*		7.78*		12.38		7.68*
R <sup>2</sup>		.10		.18		.08		.09

Note.  $n = 130$  (interpersonally harmful behaviors) and  $n = 128$  (helping behaviors). CI = 95% confidence interval. LR $\chi^2$  test indicates model fit increase via log-likelihood difference test. Model 1 was compared with a null (intercept only) model, and Model 2 was compared with Model 1.  $R^2$  = variance explained by each model, computed as the proportional reduction in the Level 1 variance component of dependent variable scores.

<sup>a</sup> Reference category was administrative staff.

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

positive and negative behaviors in organizations (e.g., Aquino et al., 1999; Dirks & Ferrin, 2002; Moorman, 1991).

### Theoretical Implications

Our study extends our current understanding of the dynamics of employee motives and interpersonal work behaviors. According to rational models of behavior (e.g., social exchange theory, goal-setting theory), employees who aim to satisfy certain motives or achieve particular goals are likely to behave in ways that will allow them to resolve the perceived actual state-perceived goal discrep-

ancy (DeShon & Gillespie, 2005). However, motives and goals can sometimes be thwarted. We have argued that thwarted belonging can produce psychological barriers that prevent employees from behaving in ways that facilitate long-term goal attainment. Our data provide indirect empirical support for the operation of these mechanisms because we did not measure them directly. The effects we found are fully consistent with the results of other studies that directly tested these mechanisms, however. Establishing more conclusively that the psychological mechanisms that explain the link between thwarted belonging and self-defeating behavior is an important area for future research. The main contribution of our study is that it provides the first empirical demonstration of a direct link between these two constructs in the context of organizations. As Fiske (2004) has noted, this initial step is critical for advancing new lines of theoretical inquiry because it lays the groundwork for exploring more complex questions such as those involving mediation.

In addition to opening the door for more complex theoretical questions, our study contributes to the ongoing discussion about the intentionality of harmful behaviors. There is little evidence that people voluntarily or knowingly engage in self-defeating behaviors (Baumeister & Scher, 1988). However, Bennett and Robinson's (2000) conceptualization of interpersonally harmful behaviors relies on the assumption that employees deliberately exhibit these behaviors. But if employees sometimes engage in interpersonally harmful behaviors even when they are self-defeating, and if there is no indication that these employees have self-destructive tendencies, it raises the theoretical possibility that some acts of deviance are not necessarily "voluntary" in the sense of their being deliberately and rationally pursued. Instead, they simply may be the result of sacrificing long-term for short-term goal accomplish-

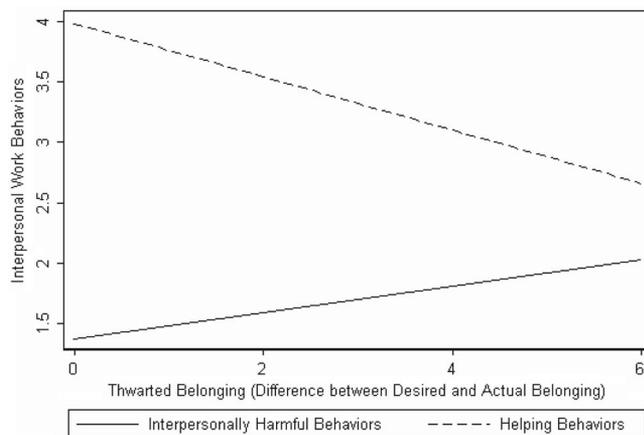


Figure 1. Overlaid linear prediction plot of interpersonally harmful and helping behaviors predicted by thwarted belonging (algebraic difference between desired and actual belonging).

ment. In other words, they may result from the self-regulatory impairments that occur as a result of thwarted belonging.

The results of our study also have practical implications for managers. Our findings suggest that creating more socially inclusive rather than socially alienating work environments may be a very effective way of reducing interpersonally harmful behaviors and increasing prosocial ones. This would be particularly true if many employees desired a greater sense of belonging. As suggested by research on deviance, a way to accomplish this would be to create a climate of interactional justice between colleagues (cf. Aquino et al., 1999).

### Limitations

Like all studies, ours has limitations. First, we cannot establish causality because we measured all constructs at one point in time. It may be that people first exhibit interpersonally harmful behaviors that lead them to experience thwarted belonging. Although we cannot rule out such an explanation, prior experimental research that operationalized thwarted belonging by directly manipulating social exclusion has shown that self-defeating behaviors, such as increased aggression and decreased helping, occur as a result of the manipulation. Therefore, we have some reason to believe that the relationship between thwarted belonging and interpersonal work behaviors follows the causal sequence we proposed. Of course, future studies using experimental or longitudinal designs are needed to more firmly support this conclusion.

A second limitation is that the correlation between actual and desired belonging was quite high in our sample. This correlation indicates that only a few employees experienced thwarted belonging. It is important to note, however, that we are not arguing that many people in organizations experience thwarted belonging. If so, organizations would be a sad place. It may be that thwarted belonging is, like many other phenomena studied in organizational behavior, a low base rate event (Robinson & Greenberg, 1998).<sup>3</sup> It could also be that the base rate of thwarted belonging is culture-sensitive. Because our sample was obtained from the Netherlands, which is a more feminine and inclusive culture than, for instance, the United States, we cannot be certain that our results would generalize to other countries. Thus, testing the relationship between thwarted belonging and work behaviors across cultures is an important question for future research.

Another potential concern is that a nonresponse analysis showed that, although our sample was representative on age and tenure, administrative jobs relative to other job types were underrepresented. Men were also underrepresented in our sample of responding employees. It is not clear to us how the nonrepresentativeness of our sample on sex and job type provides an alternative explanation for the pattern of the coefficients of desired and actual belonging we found. We also point out that we controlled for these variables in our analyses to adjust for potential differences.

A final concern is that our measure relied on the algebraic difference of two single item measures. The use of difference scores has been generally criticized in the past, which is partly grounded on misunderstandings (Edwards, 2001b). We acknowledge that additional research is needed to show that our operationalization of thwarted belonging validly predicts relevant outcomes across different samples, settings, and dependent measures. There are also alternative ways to assess thwarted belonging that might

be used in follow-up studies. For example, researchers could use network measures to construct peer reports of social inclusion and exclusion. This approach may produce greater variance and higher base rates of thwarted belonging than the one we used. Such alternative ways of measuring thwarted belonging would demonstrate the applicability of belongingness theory to organizations if the maladaptive consequences of thwarted belonging are found using different operationalizations of the construct.

### Conclusion

To summarize, our study is the first empirical demonstration that thwarted belonging in organizations is related to interpersonal work behaviors that might undermine the long-term goal of reducing the desired–actual belongingness gap. This finding challenges purely rational models of employee conduct by suggesting that employees sometimes act in ways that are self-defeating. This idea has not previously been introduced as a possible explanation for interpersonally harmful behavior or for the withholding of helping behaviors. We hope that this study will encourage a further exploration of how the need for belonging and the failure to satisfy it might influence other types of outcomes as well.

<sup>3</sup> A final implication of our study is that in our data we found only one person who indicated a desire for less belonging than the person actually had. We did not have supervisory ratings for this case; however, future research may try to sample such cases and test optimal distinctiveness theory (Brewer, 1991). This theory predicts that people try to be included in groups in which they can, optimally, both satisfy their motives for belonging and for being a unique individual. One implication of this theory is that when individuals feel more belonging than they desire, they will engage in behaviors that distance themselves from the group.

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