

Illegitimate Tasks and Counterproductive Work Behavior

Norbert K. Semmer*

University of Bern, Switzerland

Franziska Tschan

University of Neuchâtel, Switzerland

Laurenz L. Meier

University of Bern, Switzerland

Stephanie Facchin

University of Neuchâtel, Switzerland

Nicola Jacobshagen

University of Bern, Switzerland

Illegitimate tasks represent a new stressor concept that is specifically tied to feeling offended. Tasks are legitimate to the extent that they conform to norms about what can reasonably be expected from a given person, and they are illegitimate to the extent that they violate such norms. Illegitimate tasks therefore are conceived as offending one's professional identity, and thus, the self. Previous research has shown illegitimate tasks to be related to indicators of well-being and strain, controlling for other stressors. We now present two studies showing that illegitimate tasks relate to counterproductive work behavior, controlling for effort–reward imbalance in Study 1, for personality (conscientiousness and agreeableness) and organisational justice in Study 2. Thus, illegitimate tasks are associated with behavior that may be labeled “active, but in the wrong direction”.

Les tâches illégitimes représentent une nouvelle source de stress qui est spécifiquement en rapport avec une sensibilité froissée. Les tâches sont légitimes dans la mesure où elles correspondent à ce qui peut être raisonnablement attendu

* Address for correspondence: Norbert K. Semmer, Department of Psychology, University of Bern, Muesmattstrasse 45, CH-3000 Bern 9, Switzerland. Email: norbert.semmer@psy.unibe.ch

The authors are affiliated to the Swiss Centre on Affective Sciences, Geneva. We thank Danila Ménétrey, Sophie Brennecke, Chiara Castiglione, Rahel Helfenberger, Sabrina Krebs, Farah Kuster, Diana Pereira, and Jan Schmutz for their help in collecting the data.

d'une personne donnée, et illégitimes dans le cas contraire. Les tâches illégitimes sont donc perçues comme offensant l'identité professionnelle et par suite le soi. Les recherches passées ont montré que les tâches illégitimes étaient reliées à des indicateurs de bien-être et de tension en contrôlant d'autres sources de stress. Nous présentons deux études montrant que les tâches illégitimes sont en relation avec un comportement professionnel contre-productif, en contrôlant le déséquilibre effort-récompense dans la première étude, la justice organisationnelle et la personnalité (le sens des responsabilités et la convivialité) dans la seconde recherche. Les tâches illégitimes sont associées à un comportement qui peut être décrit comme «productif, mais dans une mauvaise direction.»

INTRODUCTION

Describing employees as being active and taking initiative tends to have a positive connotation (Frese & Fay, 2001). However, as Spector and Fox (2002) point out in their treatise on voluntary work behavior, people can be active, and take initiative, in many ways, including behaviors that are positive (such as organisational citizenship behavior) or negative (such as counterproductive work behavior) for the organisation. Our focus is on the latter. We present two studies that investigate the prediction of counterproductive work behavior by a new type of stressor, namely illegitimate tasks.

COUNTERPRODUCTIVE WORK BEHAVIOR

Counterproductive work behavior (CWB) “is behavior intended to hurt the organization or other members of the organization” (Spector & Fox, 2002, p. 271). CWB represents a phenomenon that is studied under a variety of terms, most notably deviance (Robinson & Bennett, 1995), but also revenge, delinquency, or antisocial behavior (see Spector & Fox, whose terminology we follow in this paper). CWB involves a variety of behaviors, both minor, such as taking overly long breaks, or using company time for private purposes, and major, such as stealing, or attacking others (in terms of physical, but more typically verbal, aggression). Besides the distinction in terms of severity (minor and major), these behaviors can be distinguished in terms of their target. CWB can be directed against specific people (interpersonal), or against the organisation (see Berry, Ones, & Sackett, 2007; Robinson & Bennett, 1995). Furthermore, some authors distinguish active and passive behaviors. Note, however, that behaviors that are labeled passive, such as not coming to work (Spector & Fox, 2002), are passive in the sense that they involve refraining from an action, but not passive in the sense that the person has no control over what he or she is doing. Rather, they all are active in the sense that they involve intentional behaviors subject to the individual's decision (see Bordia, Restubog, & Tang, 2008).

Although purely instrumental reasons for CWB are conceivable (see the discussion on hostile vs. instrumental aggression; Bushman & Anderson,

2001), affective aspects have been postulated, and found, to predict CWB, often mediating between stressful experiences at work and CWB (Barclay, Skarlicki, & Pugh, 2005; Bordia et al., 2008; Bruk-Lee & Spector, 2006; Fox, Spector, & Miles, 2001). Furthermore, associations between CWB and work stressors, including organisational constraints, role stressors, interpersonal conflict, and low degree of justice, have consistently been found (Fox et al., 2001; Spector & Fox, 2002). In general, organisational stressors were more strongly related to CWB directed at the organisation, whereas interpersonal conflict was more strongly related to interpersonal CWB (Fox et al., 2001).

Low degrees of justice (or fairness, which we regard as synonymous in this paper) have most frequently been postulated to predict CWB. This is plausible, as CWB may be conceived as an attempt to “get even” with a violation of norms attributed to a person or an organisation (Bordia et al., 2008). And, indeed, CWB has been found to be associated with low organisational justice (Acquino, Lewis, & Bradfield, 1999; Barclay et al., 2005; Berry et al., 2007; Colquitt, Conlon, Wesson, Porter, & Ng, 2001, Cohen-Charash & Spector, 2001; Fox et al., 2001; Skarlicki & Folger, 1997) but also with measures of related concepts, such as psychological contract breach (Bordia et al., 2008), or violations of trust (Bies & Tripp, 1996). Our research is in keeping with this tradition of low degrees of justice as a potential predictor of CWB. However, we focus on a specific stressor, which is the concept of illegitimate tasks. Illegitimate tasks have recently been introduced by Semmer and collaborators (Semmer, Jacobshagen, Meier, & Elfering, 2007, 2010). They refer to tasks that constitute “identity stressors” (Thoits, 1991) by violating people’s professional identity. In the following, we will introduce the concept of illegitimate tasks and develop hypotheses on how it may be linked to CWB.

ILLEGITIMATE TASKS

The Concept of Illegitimate Tasks

A task is legitimate to the extent that it conforms to norms about what can reasonably be expected from a given person, and it is illegitimate to the extent that it violates such norms. People occupy roles in organisations, which may be defined by aspects such as status (e.g. supervisor), and / or occupation. Roles are connected to expectations (Ilgen & Hollenbeck, 1991; Katz & Kahn, 1978; Stryker & Burke, 2000), defining what may legitimately be expected from the role occupant. Thus, a supervisor can be expected to take responsibility for coordinating a team’s actions, a nurse can be expected to support the healing process of a patient, etc. However, roles also imply acts that *cannot* be expected, at least under normal circumstances. Asking a registered nurse to clean the toilets is likely to be perceived as illegitimate, and therefore offending. That roles may also specify what *cannot* be expected has

not received much attention, although this aspect may have far-reaching consequences.

Roles are more than expectations, however. For many people, their professional role(s) become part of their social identity (Haslam & Ellemers, 2005; Warr, 2007). These professional identities provide them with a sense of meaning and purpose (Thoits, 1991); they are part of their global identity (Stryker & Burke, 2000), and, thus, of the self (Sluss & Ashforth, 2007). Illegitimate tasks therefore have the potential to threaten one's identity. Although it is possible to distance oneself from a role (Kreiner & Ashforth, 2004; Semmer & Schallberger, 1996), the general tendency is to value one's professional role, to be proud of it, and to see it in a favorable light (Brown, 2000; Meyer, Becker, & van Dick, 2006). People tend to defend their professional role against negative evaluations, which is most clearly seen in efforts to justify "dirty work" (Ashforth & Kreiner, 1999). One implication of the connection between role and identity is that acts, or events, that serve to confirm one's professional identity are likely to induce pride and self-esteem, whereas threats to that identity are particularly stressful (Stets, 2005; Thoits, 1991; Warr, 2007) as they threaten the motive to maintain a positive sense of self (Epstein, 1998; Sedikides & Strube, 1997).

That roles are connected not only to expectations but also to identity leads to the central proposition of our approach: Being assigned tasks that people consider incompatible with their professional roles constitutes what Thoits (1991) calls identity-threatening stressors; they thus can be seen as an offense to the self (Semmer et al., 2007).

We acknowledge that the boundaries between legitimate and illegitimate tasks are likely to be fuzzy and subject to diverging interpretations. This problem is illustrated by research on in-role and extra-role behavior. Some people define roles more broadly than others, regarding as in-role behavior what others would regard as extra-role behavior (Hofmann, Morgeson, & Gerras, 2003; Morrison, 1994). Furthermore, role definitions may not be constant over time, as people may craft their jobs, resulting in changing, removing, or adding tasks (Wrzesniewski & Dutton, 2001). We will come back to this issue.

Facets of Illegitimate Tasks

There are two facets of illegitimate tasks, which we call unreasonable tasks and unnecessary tasks. First, *unreasonable* tasks are tasks that are not appropriate to ask from a specific person. Thus, a task may be *outside of the range of one's occupation*, as when a nurse has to carry out tasks that would be considered service tasks (often described as "non-nursing activities"; Sabo, 1990). A task may also be incompatible with one's occupational *status*, as when beginners are assigned tasks that require much experience and exper-

tise, or experts are assigned tasks that do not require their professional skills. Thus, a nurse who has just received her diploma will expect not to be assigned alone to a night shift in an intensive care unit. Conversely, an “old hand” will expect not to be assigned beginners’ tasks. Another way of exceeding role requirements is inducing *unduly restrictive rules* not justified by one’s professional role. Thus, having to keep one’s desk clean is likely to be perceived as normal if one has to deal with customers, but might be considered illegitimate by people in the back office, who do not have customer contact. For reasons such as these, employees may think that they cannot be expected to carry out these tasks, and that their assignment to them is not fair. Furthermore, an illegitimate task may put people in an awkward position, as when they have to communicate a negative decision that a supervisor has made but does not want to communicate it him- or herself.

Second, *unnecessary* tasks are tasks that should not have to be carried out at all, because they do not make sense (e.g. archiving newspaper articles that no one ever reads), or because they could have been avoided, or could be carried out with less effort, if things were organised more efficiently (e.g. having to transfer data from one system to another manually because the systems are incompatible). Idiosyncratic preferences by supervisors may be another source of unnecessary tasks, as when a supervisor demands documenting things meticulously although this information is not of much value.

Unique Aspects of Illegitimate Tasks and their Implications

We consider illegitimate tasks as a stressor. Furthermore, illegitimacy can be regarded as a special construct within the general domain of justice. The question therefore arises if illegitimate tasks can be justified as a concept in its own right. Would they not be contained already in existing concepts, either task-related stressors, such as time pressure, organisational constraints, and the like (see Semmer, Zapf, & Greif, 1996), or measures of organisational justice (e.g. Colquitt, 2001) and related concepts, such as effort–reward imbalance (Siegrist, 2002)? We argue that classic concepts of stressors have neglected the issue of (il)legitimacy, and that research on justice has neglected tasks.

Illegitimacy and Classic Task-Related Stressors. Classic task-related stressors typically do not refer to issues of illegitimacy. Measures focus on how much of a stressor (e.g. time pressure) one perceives, or how often something considered stressful (e.g. interruptions) occurs (Sonnetag & Frese, 2003; Spector & Jex, 1998). They do not ask if tasks are involved that cannot be expected from the employee. (Motowidlo, Manning, & Packard, 1986, are an exception, as they included “non-nursing tasks” in their list of

stressful events.) Our connection between role expectations and tasks has an important implication that is not evident in other concepts of stressors. It implies that the very same tasks may be legitimate for one profession (e.g. cleaners) but illegitimate for another (e.g. nurses).

There is, however, one stressor concept that does overlap with illegitimate tasks. *Role conflict* refers to divergent expectations regarding work behavior (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). One of the several sub-constructs of role conflict refers to person–role conflict (also called intra-role conflict). Person–role conflict, in turn, has two aspects. The first refers to a conflict “between the focal person’s internal standards or values and the defined role behavior . . .” (Rizzo, House, & Lirtzman, 1970, p. 155). The concept of illegitimate tasks would fit this definition but is much more specific. Thus, for a person–role conflict to occur, any type of internal standard may be violated, such as moral standards (emphasised by Kahn et al., 1964; see Beehr & Glazer, 2005), and any role behavior may be affected, such as having to do things that should be done differently. By contrast, illegitimate tasks specifically refer to tasks, but not in terms of an intrinsic quality (such as immorality). Rather, any type of task may be illegitimate in a specific situation or for a specific person. The second aspect of person–role conflicts refers to a conflict “between the time, resources, or capabilities of the focal person” (Rizzo et al., 1970, p. 155), such as receiving an assignment “without the manpower to complete it” (Rizzo et al., 1970, p. 156); this is rather far away from the concept of illegitimate tasks. In terms of measurement, the overlap between illegitimate tasks and role conflicts reduces to one item in the scale by Rizzo et al., which refers to having to work on unnecessary things.

Thus, aspects resembling illegitimate tasks represent a small part of person–role conflict, which itself is only a sub-construct of role-conflict—and arguably one that has been rather peripheral in this research tradition, as role conflict “is typically envisaged as disagreement between two or more role-senders” (Katz & Kahn, 1978, p. 204). We feel that illegitimate tasks represent a construct in its own right, which, however, may well be seen as a construct within the broader domain of role stress.

Illegitimacy and Poor Justice. Illegitimate tasks violate norms about what can reasonably be expected from someone. Therefore, illegitimate tasks can be regarded as a specific construct within the wider domain of justice. However, research investigating the effects of poor justice typically does not focus on tasks. Rather, it is concerned with the allocation of resources, such as pay and rewards, or with the (in)adequacy of performance ratings and feedback (see Colquitt, 2001). As an example, Colquitt’s organisational justice scale asks about “outcomes you receive from your job (e.g. pay, promotions, etc.)” (Colquitt, 2001, p. 395). Other dimensions of justice, such as procedural and interactional justice, also refer to procedures and behav-

iors enacted when deciding about job outcomes (see Colquitt & Shaw, 2005). Tasks are largely absent in this research. Tasks are, however, a constitutive element of jobs and professions, and they are important carriers of professional identity (Griffin, 1987; Wrzesniewski & Dutton, 2001). To the extent that our reasoning about the symbolic meaning of tasks in terms of their conformity to role expectations is correct, focusing on tasks adds a new element to the general domain of justice.

Furthermore, theories in the domain of justice are able to predict what consequences might occur once a task is identified as illegitimate. They cannot, without resorting to issues of role expectations and professional identity, predict what makes a task illegitimate in the first place. To predict what is likely to be considered illegitimate, one has to refer to the meaning that people attach to tasks in relation to their professional role, and their professional identity attached to this role (Semmer et al., 2007).

Illegitimate Tasks and the Psychological Contract. Since the assignment of illegitimate tasks violates expectations about what can reasonably be expected, it might be regarded as a breach of the psychological contract. However, psychological contracts refer to (perceived) promises by an organisation or its representatives (Morrison & Robinson, 1997; Shore & Tetrick, 1994). No such promises are required for illegitimate tasks. Furthermore, these promises typically refer to issues such as career prospects (rather than to tasks), and they refer to promises to an individual, not to violations of professional role expectations.

Illegitimate Tasks and Person–Environment (P–E) Fit. One could argue that illegitimate tasks represent some kind of poor P–E fit. However, P–E fit is a very general concept that does not refer to the specific characteristics of illegitimate tasks (see Edwards, Caplan, & van Harrison, 1998; see also the concept of job embeddedness, an “antiwithdrawal concept” that contains fit as a central element; Lee, Mitchell, Sablinski, Burton, & Holtom, 2004).

Illegitimate Tasks and Extra-Role Behavior. Like extra-role behavior, illegitimate tasks refer to something that is outside one’s role obligations. However, the extra-role behavior tradition has a very different focus (see Morrison, 1994). First, extra-role behavior typically refers to rather general acts that are characteristic for being polite, committed, and helpful. Illegitimate tasks do not require these characteristics. Second, research on extra-role behavior focuses on reasons why people *voluntarily* engage in such behavior. By contrast, illegitimate tasks are *assigned* tasks; if people do them voluntarily they are not illegitimate any more. However, if superiors have broader role-definitions than their employees, they may take behaviors for

granted that their employees consider to be extra-role behaviors; by denying their voluntary character, they might turn them into illegitimate tasks for their employees.

Conclusion: Unique Aspects of Illegitimate Tasks. In sum, we argue that it is the unique blend of referring (a) to tasks (that is, to the content, rather than the outcomes, of one's work), (b) to the importance of tasks in terms of one's professional identity, and (c) to the violation of role expectations that make illegitimate tasks a unique construct. To the extent that this reasoning is correct, illegitimate tasks should be associated with other stressors as well as with poor organisational justice, yet explain variance in potential outcome variables over and above these variables. Only if the latter implication can be confirmed empirically is it justified to regard illegitimate tasks as a construct in its own right.

In a study by Semmer et al. (2010), illegitimate tasks were shown to predict well-being, after controlling for a number of other stressors, as well as for organisational justice. In the two studies presented here, we tested the association of illegitimate tasks with counterproductive work behavior. As a justice-related stressor, illegitimate tasks should induce negative affect (e.g. anger) as well as a desire for getting things even. We therefore present the following hypotheses:

Hypothesis 1a: Illegitimate tasks are positively associated with CWB.

Hypothesis 1b: The association with CWB holds when controlling for other constructs that are related to issues of justice.

METHOD

Overview

We present two studies that were conducted independently of one another at the Universities of Bern (Study 1; German-speaking part of Switzerland) and Neuchâtel (Study 2; French-speaking part). Both studies used the Bern Illegitimate Tasks Scale (BITS), and both assessed counterproductive work behavior, although with different instruments. Control variables measured were overlapping but not completely identical. Besides socio-demographic variables, Study 1 controlled for effort–reward imbalance (ERI; Siegrist, 2002), and Study 2 controlled for organisational justice and for two personality variables, conscientiousness and agreeableness. In Study 2, the questionnaire was in French. English or German scales were translated into French from the original language and back-translated by native speakers. Corresponding to demographic differences between the German and the

French part of Switzerland, more participants had completed an apprenticeship in Study 1, while more participants had obtained a university degree in Study 2.

Sample: Study 1

Students who were employed part-time approached colleagues at work and asked whether they were willing to fill out a questionnaire assessing organisational well-being. They distributed 450 questionnaires, together with a stamped envelope addressed to the university research team. Of these, 199 were returned without missing data on relevant variables, corresponding to a response rate of 42 per cent. Participants came from such diverse organisations as sales, a research institution, or a glazier's workshop. There were more white-collar workers (71%) than blue-collar workers (26%); 3 per cent gave no job information. Average age was 38.7 years ($SD = 12.63$). A slight majority (57%) was female. Fifty-two per cent had completed regular school (9 years) or an apprenticeship, 32 per cent had completed college, and 16 per cent had a university degree. Most of the participants (59%) were employed full-time; the average level of employment was 83 per cent ($SD = 25.28$) of a full-time equivalent (FTE).

Sample: Study 2

Participants were recruited by approaching several organisations. Furthermore, we used a snowball system, asking people who were willing to participate whether they would ask colleagues to participate as well. In order to be eligible, participants had to be employed at a level of at least 33 per cent of a full-time equivalent. A total of 293 questionnaires were distributed, together with a stamped envelope addressed to the university research team. Of these, 205 were returned without missing data on relevant variables, corresponding to a response rate of 70 per cent. Participants were employed in a wide variety of sectors: 30.2 per cent in retail, 21.5 per cent in administration, 7.8 per cent in industrial production, 5.4 per cent in the financial and insurance industry, and 35.1 per cent in other domains. Average age was 33.4 years ($SD = 10.5$). A slight majority (55.6%) was female. Roughly a third had completed regular school (9 years) or an apprenticeship (30.2%), college (32.2%), or university (37.6%). Almost two-thirds (65.4%) were employed full-time; average level of employment was 88.4 per cent ($SD = 21.3$) of an FTE.

Measures

Bern Illegitimate Tasks Scale (BITS). In both studies, illegitimate tasks were assessed with the Bern Illegitimate Tasks Scale (BITS; Semmer et al.,

2010). The BITS consists of eight items. Four of these ask for “unnecessary tasks”. They start with the introduction, “Do you have work tasks to take care of, which keep you wondering if . . .” followed by statements like “. . . they have to be done at all?”, or “. . . they would not exist (or could be done with less effort), if things were organised differently?” Four items ask for unreasonable tasks. They start with the introduction, “Do you have work tasks to take care of, which you believe . . .” followed by statements like “. . . should be done by someone else?” or “. . . are going too far, and should not be expected from you?” Answers were in a Likert-type format, ranging from *never* (1) to *frequently* (5) in Study 1, from *never* (1) to *frequently* (7) in Study 2. The total scale had an internal consistency of $\alpha = .83$ in Study 1, and $\alpha = .88$ in Study 2. However, factor analyses yielded two factors, corresponding to the two facets unreasonable and unnecessary tasks. As described below, we tested via structural equation modeling (a) if BITS could be modeled as a second-order latent construct, consisting of two first-order constructs, and (b) if BITS could be distinguished from the other predictors, that is, ERI in Study 1, and organisational justice in Study 2.

Effort–Reward Imbalance. The perceived imbalance between effort and reward was assessed using a scale by van Yperen (1996) in Study 1. It consists of six statements (e.g. “I invest more in my job than I receive in return”) with a 7-point answer format from *completely disagree* (1) to *completely agree* (7). Internal consistency was good ($\alpha = .89$).

Organisational Justice. In Study 2, organisational justice was measured with three subscales, referring to distributive, procedural, and interactional justice (e.g. Skarlicki & Folger, 1997). All three scales had an answer format ranging from *absolutely do not agree* (1) to *completely agree* (7). *Distributive justice* was measured with a five-item scale developed by Niehoff and Moorman (1993). Sample items are “My work schedule is fair”, or “I consider my work load to be quite fair”. Cronbach’s alpha was .78. *Procedural justice* was measured with an adaptation of a scale by Colquitt (2001), referring to procedures used in arriving at a decision. Sample items were “To what extent . . . have those procedures upheld ethical and moral standards” or “. . . have you been able to express your views and feelings during those procedures?” There were nine items; Cronbach’s alpha was .92. *Interactional justice* was measured by the nine-item scale developed by Niehoff and Moorman (1993). A sample item is, “When decisions are made about my job, the general manager treats me with respect and dignity.” Cronbach’s alpha was .97.

As in other studies, the three justice measures correlated considerably with each other ($r = .63$ to $r = .87$). We therefore combined them into a single measure, thus avoiding multicollinearity, and reducing the number of pre-

dictors in the analyses. The appropriate reliability coefficient in this case is the composite score reliability (Nunnally & Bernstein, 1994, pp. 266 ff.), which was $r_{yy} = .96$.

Personality. In Study 2, we controlled for two personality variables, conscientiousness and agreeableness. Conscientiousness is characterised by scrupulousness, cautiousness, and dutifulness, implying adherence to standards of conduct (Costa, McCrae, & Dye, 1991). CWB represents a violation of such standards, and therefore should be negatively associated with conscientiousness. Agreeableness includes altruism and cooperativeness (Costa et al., 1991) and therefore should also be negatively related to CWB. Empirically, such associations have been found for both variables (Salgado, 2002). Conscientiousness and agreeableness were assessed using a measure by Schallberger and Venetz (1999), based on Ostendorf's (1990) measure of the Big Five. Each scale contains six bipolar adjective items. Cronbach's alpha was .75 for conscientiousness and .69 for agreeableness.

Counterproductive Work Behavior (CWB). In Study 1, CWB was assessed using a seven-item scale by Blau and Andersson (2005) that measures incivility. Participants had to indicate, separately for supervisors and colleagues, how often during the previous year they had shown each of seven behaviors such as "paid little attention to a statement made by him/her or showed little interest in his/her opinion", "gossiped about him/her behind his/her back". A 7-point response scale was used, where 1 = *never*, 2 = *hardly ever (once every few months)*, 3 = *rarely (once per month)*, 4 = *occasionally (several times per month)*, 5 = *sometimes (once per week)*, 6 = *frequently (once per day)*, and 7 = *very frequently (several times per day)*. Internal consistency was $\alpha = .77$ for CWB against supervisor, and $\alpha = .78$ for CWB against colleagues.

In Study 2, counterproductive work behavior was assessed with two scales adapted from Bennett and Robinson (2000). The *organisational deviance* scale comprises 18 items describing deviant behavior directly harmful to the organisation. Respondents indicated, on a 7-point Likert scale ranging from 1 (*never*) to 7 (*daily*), to what extent they had engaged in a number of behaviors during the last year. Examples are "taken property from work without permission" or "intentionally worked slower than you could have worked". We added two items asking about using the company internet for private matters or the company phone at the organisation's expense. Cronbach's alpha was .77. The eight-item *interpersonal deviance* scale measures behaviors harmful to other individuals within the organisation. Respondents are asked to indicate, on a 7-point Likert scale ranging from *never* (1) to *daily* (7), to what extent they had, during the last year, engaged in behaviors such as "made fun of someone at work" or "played a mean prank on someone at work". Cronbach's alpha was .71.

Further Control Variables. Previous research found gender (Hershcovis, Turner, Barling, Arnold, Dupré, Inness, LeBlanc, & Sivanathan, 2007), age (Berry et al., 2007), and education (Douglas & Martinko, 2001) to be related to CWB. We therefore controlled for these variables in both studies. Education was assessed by the highest qualification obtained, ranging from basic schooling (9 years) and apprenticeship to a university degree. Furthermore, since employees working more hours spend more time in the organisation, and thus have more opportunity to show counterproductive work behavior, we controlled for hours worked, expressed as percentage of a full-time equivalent (FTE).

Analysis Strategy

We first conducted analyses concerning the status of BITS. Using structural equation modeling, we modeled BITS as a second-order latent variable. It consisted of unreasonable tasks and unnecessary tasks as first-order latent variables, which were each represented by the respective four items as indicators. ERI (Study 1) was modeled as a latent variable with the six items as indicators. Organisational justice (Study 2) was modeled as a second-order latent variable; the three justice variables were first-order latent variables, with two (distributive justice) and three (procedural justice, interactional justice) items as indicators. We then tested if a model containing BITS and ERI (Study 1), and BITS and organisational justice (Study 2) would yield a good fit, and if these models were superior to models containing all predictors as indicators of a single latent construct. Based on the results of these analyses, we ran multiple regression analyses, entering demographics (age, gender, hours worked, education, organisational tenure) and personality (agreeableness, conscientiousness) in step 1, ERI (Study 1) or organisational justice (Study 2) in step 2, and BITS in step 3.

RESULTS

Measurement Models: BITS as a Construct in its own Right

For Study 1, the model containing ERI and BITS as two constructs (BITS as a second-order construct) fit the data quite well ($\chi^2 = 139.07$, $df = 75$; CFI = .95; TLI = .94; RMSEA = .07). Furthermore, a single-construct model that contained the ERI items and the two first-order latent variables (unreasonable tasks and unnecessary tasks) as indicators of one single latent variable yielded a poorer fit ($\chi^2 = 203.19$, $df = 77$; CFI = .90; TLI = .88; RMSEA = .09), and the difference between the two models was significant ($\Delta\chi^2 = 64.12$, $df = 2$, $p < .001$).

For Study 2, the model containing organisational justice and BITS as two constructs (both as second-order constructs) fit the data quite well ($\chi^2 = 182.62$, $df = 98$; CFI = .97; TLI = .97; RMSEA = .07). A model that used all five first-order latent variables (the three justice variables and the two BITS sub-facets) as indicators of one single second-order construct yielded a poorer fit ($\chi^2 = 216.28$, $df = 99$; CFI = .96; TLI = .95; RMSEA = .08), and the difference was significant ($\Delta\chi^2 = 33.66$, $df = 1$, $p < .001$). Details about these analyses can be obtained from the authors.

Thus, BITS does represent a distinct construct in its own right. These results made it possible to test the hypothesis that BITS was able to explain variance in CWB over and above ERI (Study 1), organisational justice (Study 2), and control variables.

Correlation and Regression Analyses: Study 1

Table 1 shows means, standard deviations, and intercorrelations among the variables in Study 1. None of the control variables was associated with CWB, and only hours worked was associated with one of the psychological stressors (ERI). Both ERI and BITS were associated with CWB, with slightly higher coefficients for CWB against supervisors, and with somewhat higher coefficients for BITS. The two indicators of CWB were associated with one another. The association between BITS and CWB supports Hypothesis 1a.

Table 2 shows the results of the regression analyses with regard to CWB towards supervisors (left) and towards colleagues (right). Control variables did not explain any variance in either dependent variable. ERI was significant for both dependent variables before BITS was entered, but retained significance only for CWB towards supervisors after BITS was in the model. In the final model, BITS was statistically significant for both dependent variables. Hypothesis 1b is therefore supported for both kinds of CWB.

Correlation and Regression Analyses: Study 2

Table 3 shows means, standard deviations, and intercorrelations for Study 2. Of the control variables, age and being male were associated with less, and higher education with more, CWB. Conscientiousness was related to less CWB, more so with regard to the organisation. By contrast, agreeableness was associated with interpersonal CWB more strongly than to CWB toward the organisation. The association between organisational justice and CWB was significant. As in Study 1, BITS was associated with CWB, again supporting Hypothesis 1a.

Table 4 shows the results of the regression analyses with regard to CWB towards the organisation (left) and towards individuals (right). Age was

TABLE 1
Descriptive Statistics and Correlations among Variables in Study 1

	M	SD	1	2	3	4	5	6	7	8	9
1. Age	38.68	12.63	—								
2. Gender (1 = f, 2 = m)	1.43	.50	.03	—							
3. Education ^a	—	—	.12	.12	—						
4. Hours worked ^b	82.59	25.28	-.04	.45**	.18*	—					
5. Organisational tenure	7.08	7.56	.57**	.05	-.06	-.05	—				
6. ERI	2.58	1.06	-.10	.03	-.12	.20**	.01	(.89)			
7. Illegitimate tasks ^c	2.16	0.60	-.09	.09	.03	.13	-.08	.48**	(.83)		
8. CWB-SV	1.48	0.49	-.07	.06	.02	.10	-.09	.34**	.44**	(.77)	
9. CWB-Coll	1.62	0.52	-.12	.07	-.04	.05	-.15*	.19**	.33**	.57**	(.78)

Notes: N = 199. In parentheses: Cronbach's Alpha. ^a Spearman's Rho, as education is a categorical variable. ^b in percent of a full-time equivalent. ^c BITS, format 1 to 5. ERI = Effort-Reward Imbalance. CWB = Counterproductive Work Behavior, assessed in terms of incivility against supervisors (CWB-SV) and against colleagues (CWB-Coll; see measures section). * $p < .05$; ** $p < .01$.

TABLE 2
Regression Models Predicting CWB in Study 1

Model	Variable	CWB incivility against supervisor				CWB incivility against colleagues			
		B	SE B	β	Delta R ²	B	SE B	β	Delta R ²
1	Age	-.001	.003	-.033	.000	-.002	.004	-.049	.004
	Gender ^a	.032	.079	.032		.090	.084	.086	
	Education (dummy 1)	-.055	.079	-.053		-.078	.084	-.070	
	Education (dummy 2)	.033	.103	.025		-.028	.110	-.020	
	Hours worked ^b	-.002	.002	.080		.000	.002	.006	
	Organisational tenure	-.005	.006	-.074	.105**	-.009	.006	-.130	.030*
2	Age	.000	.003	.010		-.001	.004	-.026	
	Gender ^a	.055	.075	.056		.103	.083	.098	
	Education (dummy 1)	-.007	.075	-.007		-.050	.083	-.045	
	Education (dummy 2)	.101	.098	.075		.011	.109	.008	
	Hours worked ^b	.000	.002	-.009		-.001	.002	-.042	
	Organisational tenure	-.007	.005	-.103		-.010	.006	-.146	
	ERI	.163	.032	.352**	.085**	.094	.036	.191*	.061**
3	Age	.000	.003	.011		-.001	.003	-.024	
	Gender ^a	.026	.071	.027		.077	.081	.074	
	Education (dummy 1)	-.029	.071	-.028		-.071	.081	-.064	
	Education (dummy 2)	.068	.094	.051		-.019	.106	-.013	
	Hours worked ^b	.000	.000	-.002		-.001	.002	-.036	
	Organisational tenure	-.005	.005	-.076		-.008	.006	-.122	
	ERI	.084	.035	.182*		.022	.040	.045	
Illegitimate tasks	.275	.060	.340**		.254	.068	.293**		

Notes: $N = 199$, $R^2 = .190$ (Supervisor) / .095 (Colleagues), CWB = Counterproductive Work Behavior (see methods section), Education: Dummy 1: Basic schooling/apprenticeship = 0; college = 1; Dummy 2: Basic schooling/apprenticeship = 0; University degree = 1. ^a 1 = female, 2 = male, ERI = Effort-reward imbalance. ^b in percent of a full-time equivalent. * $p < .05$; ** $p < .01$.

TABLE 3
Descriptive Statistics and Correlations among Variables in Study 2

	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	33.35	10.46	—									
2. Gender (1 = f, 2 = m)	1.44	.50	.11	—								
3. Education ^a	—	—	-.06	-.07	—							
4. Hours worked ^b	88.41	18.42	-.07	.35**	-.04	—						
5. Conscientiousness	4.78	.65	.25*	-.08	-.07	.06	(.75)					
6. Agreeableness	4.56	.61	.06	-.08	-.04	-.06	.45**	(.69)				
7. Organisational Justice	4.79	1.13	-.10	-.05	-.06	.08	.09	.16*	(.96) ^c			
8. Illegitimate tasks ^d	3.19	1.16	.02	.11	.07	.07	-.13	-.12	-.50**	(.88)		
9. CWB-Org	2.19	.67	-.36**	.05	.19**	.09	-.42**	-.22**	-.20**	.30**	(.77)	
10. CWB-IP	1.65	.69	-.14*	.16*	.02	.11	-.25**	-.42**	-.17*	.24**	.43**	(.71)

Notes: N = 205. In parentheses: Cronbach's Alpha. ^a Spearman's Rho, as education is a categorical variable. ^b in percent of a full-time equivalent; ^c composite score reliability (Nunnally & Bernstein, 1994). ^d BITS, format 1 to 7. CWB = Counterproductive Work Behavior, assessed as dysfunctional behavior towards the organisation (CWB-Org) and towards other individuals (CWB-IP; see measures section). * p < .05; ** p < .01.

TABLE 4
Regression Models Predicting CWB in Study 2

Model	Variable	CWB towards the organisation				Interactional CWB					
		B	SE B	β	Delta R ²	B	SE B	β	Delta R ²		
1	Age	-.017	.004	-.270**	.272**	-.009	.004	-.138	.248**		
	Gender ^a	.035	.090	.026		.182	.094	.131			
	Education (dummy 1)	.233	.106	.162*		.246	.110	.166*			
	Education (dummy 2)	.178	.101	.128		-.051	.106	-.036			
	Hours worked ^b	.003	.002	.095		.002	.003	.056			
	Conscientiousness	-.335	.074	-.322**		-.032	.078	-.030			
	Agreeableness	-.034	.076	-.031		-.429	.079	-.380**			
	Age	-.019	.004	-.291**		.040**	-.010	.004		-.148	.010
	Gender ^a	.017	.088	.013			.173	.094		.124	
	Education (dummy 1)	.207	.103	.144*			.233	.110		.158*	
Education (dummy 2)	.193	.099	.139	-.043	.105		-.030				
Hours worked ^b	.004	.002	.113	.002	.003		.065				
Conscientiousness	-.327	.072	-.315**	-.028	.077		-.026				
Agreeableness	.000	.074	.000	-.412	.079		-.366**				
Organisational justice	-.124	.037	-.207**	-.062	.039		-.101				
Age	-.019	.004	-.289**	.028**	-.010		.004	-.147*	.019*		
Gender ^a	.006	.086	.004		.163		.093	.118			
Education (dummy 1)	.196	.101	.136		.224	.109	.151*				
Education (dummy 2)	.181	.097	.130		-.054	.104	-.038				
Hours worked ^b	.003	.002	.093		.002	.003	.049				
Conscientiousness	-.310	.071	-.298**		-.014	.077	-.013				
Agreeableness	-.005	.073	-.004		-.415	.079	-.369**				
Organisational justice	-.065	.041	-.108		-.012	.045	-.020				
Illegitimate tasks	.114	.040	.197**		.096	.043	.160*				

Notes: N = 205. R² = .341 (Org) / .277 (Coll). CWB = Counterproductive work behavior. Education: Dummy 1: Basic schooling / apprenticeship = 0, college = 1; Dummy 2: Basic schooling / apprenticeship = 0, University degree = 1. ^a 1 = female, 2 = male. ^b in percent of a full-time equivalent. * $p < .05$; ** $p < .01$.

associated with less CWB towards the organisation. Having a college degree predicted CWB towards individuals. Conscientiousness was associated with CWB towards the organisation, and agreeableness with CWB towards individuals. Organisational justice predicted CWB towards the organisation when first entered, but not any more after BITS was entered. In the final model, BITS was statistically significant for both dependent variables. Hypothesis 1b is therefore supported for both kinds of CWB.

DISCUSSION

Illegitimate tasks were associated with counterproductive work behavior in two independent samples, both with regard to interpersonal CWB and CWB towards the organisation, supporting Hypothesis 1a. Controlling for effort–reward imbalance in Study 1 and for organisational justice as well as conscientiousness and agreeableness in Study 2, illegitimate demands predicted CWB in both studies, supporting Hypothesis 1b. In both cases, illegitimate tasks were associated somewhat more strongly with CWB directed against the organisation (or the supervisor as its representative) than with CWB directed against other individuals / colleagues. Since tasks are typically assigned by supervisors, this difference is not unexpected. If anything, one might have expected it to be more pronounced, as CWB tends to be target-specific (Hershcovis et al., 2007).

That BITS predicted CWB towards colleagues may be due to a generalising tendency of CWB, in that a propensity towards CWB becomes stronger in general. Displaced aggression might also explain this association, in that aggression against supervisors / the organisation is wreaked on colleagues (Marcus-Newhall, Pedersen, Carlson, & Miller, 2000). It is also possible, however, that workers (re)distribute tasks among themselves, implying that colleagues would be seen as responsible for the illegitimacy.

Regarding personality variables it is noteworthy that conscientiousness predicted CWB towards the organisation, whereas agreeableness predicted interpersonal CWB. This is plausible, as conscientiousness refers to the work situation in general, whereas agreeableness is an interpersonal construct.

Illegitimate Tasks as a Construct in its own Right

Our results show that the construct of illegitimate tasks is distinct from organisational justice and ERI (which also is a justice-related construct). Furthermore, BITS predicted CWB with ERI (Study 1) and organisational justice (Study 2) controlled. Thus, illegitimate tasks cannot be reduced to an aspect of justice that is already covered by justice measures. Rather, they must contain elements that are not salient when people think about the degree of justice they encounter.

Note that the organisational justice measures are positively worded, implying that low values indicate low degrees of justice. Low degrees of a construct (justice) are not necessarily the same as high degrees of its opposite (*injustice*). Had we only controlled for justice, one could have argued that illegitimate tasks simply reflect high degrees of *injustice*. However, ERI is negatively worded, implying that high values indicate high degrees of injustice. That illegitimate tasks still predict CWB when controlling for ERI (Study 2) strengthens the case for illegitimate tasks as a construct in its own right.

We believe that what renders illegitimate tasks a unique construct is its focus on tasks in combination with role-expectations and professional identity. Tasks affirm one's professional identity if they correspond to role-expectations, and offend one's professional identity if they violate them. Illegitimate tasks can be seen as a more focused variant of person–role conflict (Kahn et al., 1964; Beehr & Glazer, 2005), emphasising aspects that have not been developed in research on this latter concept.

Since the legitimacy of tasks depends on role definitions, their appraisal is subject to individual differences, and to differences between groups and organisations. What is regarded as legitimate by one individual (or in one organisation) may be regarded as illegitimate by another one. Such issues of role-boundaries have been investigated mainly with regard to extra-role behavior (see Hofmann et al., 2003; Morrison, 1994). Illegitimacy is also subject to changes over time, as when technical experts increasingly have to include “maintaining customer relations” in their role definition.

Note that a task is not illegitimate per se. Its (il)legitimacy rather depends on the context, most notably the professional characteristics of the people involved. Thus, the same task may be legitimate for one profession but illegitimate for another one; it may be legitimate for someone with a certain amount of experience but illegitimate for someone with more (or less) experience, and the like. Even for one person, legitimacy may vary depending on the situation, as when a nurse perceives the demand to close the window as perfectly legitimate when it comes from a patient who is very frail but as illegitimate when the patient could easily close the window him- or herself (Semmer, 2000). The differences that are important here are professional differences, not only individual differences in terms of personal preferences, attitudes, or personality variables. Thus, an individual may consider a task boring but at the same time legitimate—it is boring because it does not fulfill the individual's need for stimulation but it may be part of the individual's professional role. Standing guard at a government building might be an example.

This issue of professional identity is a *conceptual* one; it refers to the content of the appraisal in terms of professional standards. Appraising a task as illegitimate depends on the answer to the question “Can they reasonably expect this from me?”, rather than “do I like this task?” or “is this task

stressful for me?" Professional groups are likely to develop standards for the (il)legitimacy of tasks, which is reflected in specific terms for illegitimate tasks in professional communities, such as "non-nursing activities" (Sabo, 1990).

Measuring illegitimate tasks on an individual basis, as we did, is likely to introduce individual variance both in terms of appraisal and in terms of "objective" (i.e. commonly agreed) illegitimacy. In terms of appraisal, individuals differ in how broadly they define their role (Hofmann et al., 2003; Morrison, 1994). Thus, nurses are likely to define their job in terms of care, but may differ with regard to including service as well. Such tendencies may be related to people's relation to their work in general. For instance, Morrison (1994) found that higher job satisfaction and affective commitment went along with a broader role definition. It is also conceivable that certain personality characteristics, such as conscientiousness, might be associated with broader role definitions (although this association did not achieve statistical significance in our data). In terms of "objective" illegitimacy, job crafting could lead to idiosyncratic definitions of (il)legitimacy that are actually rooted in different tasks (Semmer & Schallberger, 1996; Wrzesniewski & Dutton, 2001). Further research should investigate to what extent certain groups agree or disagree on issues of (il)legitimacy.

Limitations

The major limitation of our studies is that they are both cross-sectional. Thus, CWB may cause tasks to be perceived as illegitimate, because illegitimacy could justify CWB. This process does not seem very likely, given that we control for effort–reward imbalance in Study 1, and for organisational justice as well as conscientiousness and agreeableness in Study 2. Nevertheless, it cannot be ruled out. Studies with longitudinal designs are therefore needed.

Second, all our measures were based on self-report. The fact that illegitimate tasks explained variance in CWB over and above a number of variables that were also based on self-report makes it unlikely that our results can be explained in terms of common method variance. Nevertheless, we cannot rule out such influences, and studies that use alternative methods in addition to self-report are necessary.

Third, rather than calculating effort–reward imbalance from two scales assessing effort and reward, respectively, as suggested by Siegrist (e.g. 2002), we used van Yperen's (1996) scale, which asks participants to directly evaluate the (im)balance. The available research on this issue indicates, however, that such a measure is at least equivalent to a researcher-calculated ratio (Schaufeli, 2006). Van Yperen's scale has the advantage of being simpler.

Fourth, the fact that counterproductive work behavior was assessed in two different ways in the two studies represents both a weak and a strong point.

It is a weak point because the two scales are not exactly comparable. It is a strong point because results may be seen as more robust if their replication does not depend on a specific measure.

Finally, showing that illegitimate tasks explain variance in CWB (and well-being; Semmer et al., 2010) is only the beginning. Not all the elements postulated in our theoretical concept have been measured so far. Further studies will have to assess mediating variables, such as feeling offended, in order to confirm the processes we postulate.

Theoretical and Practical Implications

Our way of conceptualising illegitimate tasks has an implication that may seem counterintuitive at first sight. When trying to identify stressors characterising a certain work environment, one may be inclined to look for stressors that are typical for a profession. Our theoretical position implies, however, that typical stressors are not necessarily more stressful than other stressors. They actually may be *less* stressful, as they “define” one’s profession. Dealing with them successfully may therefore affirm people’s professional identity.

There are indications in the literature that support our reasoning. Meara (1974) reports butchers to be proud of being able to withstand the cold. Peeters, Schaufeli, and Buunk (1995) report that stressors that are a natural part of one’s profession are perceived as less, not more, significant. Haslam, O’Brien, Jetten, Vormedal, and Penna (2005) found that people from two occupations (bomb disposal officers and bar staff) judged their own occupational stress to be *less* serious than that of the respective other group. Semmer, Jacobshagen, and Meier (2006) asked about illegitimate tasks in an interview study. Distinguishing between tasks that defined a profession (core tasks) from secondary tasks, they found the majority of illegitimate tasks to be secondary rather than core tasks. In sum, stressors that are intimately associated with one’s professional identity may be less damaging than stressors that are not. In more general terms, the concept of illegitimate tasks points to the necessity of looking at stressors in the context of social (in our case, professional) identities (Haslam, 2004).

In practical terms, our results have important implications. As long as the tasks in question are not seriously demeaning (which would indicate mobbing / bullying; Hoel, Zapf, & Cooper, 2002), supervisors may not realise the issue of illegitimate tasks as a potential problem. As their role implies taking a broader perspective (Katz & Kahn, 1978), superiors may simply look at tasks in terms of their necessity for the department, or the organisation as a whole. The issue of illegitimacy may not be salient for them, or they may see it as a minor problem (Bartlett, 2003). Thus, a first implication is that supervisors should be aware that tasks they assign may be evaluated as illegitimate, and they should be aware that such an appraisal may increase

the chances for CWB. This is not a trivial problem. Subordinates who are offended may not communicate their feelings, since critical upward communication in organisations tends to be restricted (Tourish & Robson, 2006). Thus, supervisors may falsely assume that their assessment is shared by their subordinates (see Morrison, 1994).

Note, however, that such an increased awareness does not automatically imply *not* assigning these tasks. A supervisor may judge an employee's role definition as too narrow (see Morrison, 1994) and consider clarifying roles. Furthermore, an assignment that is illegitimate in principle may be justified by circumstances, such as illness of those who should be assigned these tasks. In such cases, a supervisor may well have to insist. However, research on interactional justice (Cropanzano, Byrne, Bobocel, & Rupp, 2001) shows that an offense may be avoided, or attenuated, by explicitly justifying the assignment. Through this explicit justification, supervisors communicate that they respect people's entitlements in principle and that they acknowledge expecting something exceptional. It may also be helpful if supervisors themselves participate in carrying out such tasks, demonstrating that they do not expect things from others that they are not willing to do themselves. In other cases, a supervisor may decide not to assign a certain task to a specific person, or to restrict the time that that person is expected to work on these tasks.

Whatever consequences supervisors may draw, the important implication of this research is that they should be aware of a potential threat to an employee's professional identity, and thus be able to make informed choices on the basis of weighing pros and cons in a given situation, rather than simply communicating a task assignment without being aware of the potential consequences. Although our research precludes a causal interpretation, it certainly suggests that a heightened awareness of supervisors to these issues will benefit both the employees and the organisation.

Future Directions

The two studies presented here focus on active, voluntary behavior, more specifically counterproductive behavior directed against one's organisation or against other people. Thus, we are dealing with behavior that is active, but in the wrong direction. Having demonstrated associations with well-being (Semmer et al., 2010), the current findings suggest that illegitimate tasks are a construct worth investigating with regard to a rather broad range of potential outcomes.

But this is only the beginning. What is needed is research using longitudinal designs, and measures other than self-report. Also, since the concept of illegitimate tasks refers to professional identities, it is important in future research to assess the construct not only on the individual level but also on the level of professional groups. What is also needed is research into the

mechanisms that are responsible for the effects of illegitimate tasks. Our theoretical thinking does specify such mechanisms, but so far we have tested only the implications of these considerations, not the mechanisms themselves. In particular, the specific emotional reactions involved deserve more attention. Furthermore, research on possible moderators seems warranted. Among these are personal characteristics, such as self-esteem (both in terms of level and in terms of stability; Meier, Semmer, & Hupfeld, 2009), or justice sensitivity (Schmitt & Dörfel, 1999), but also the extent to which one identifies with one's job, profession, or organisation, and the breadth of people's role definition (see Morrison, 1994). Also, role definitions of professional groups, rather than only individuals, are of concern. Investigating such issues with a focus on the meaning of tasks in terms of professional roles and professional identity does seem a promising avenue.

REFERENCES

- Acquino, K., Lewis, M.U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior, 20*, 1073–1091.
- Ashforth, B.E., & Kreiner, G.E. (1999). "How can you do it?": Dirty work and the challenge of constructing a positive identity. *Academy of Management Review, 24*, 413–434.
- Barclay, L.J., Skarlicki, D.P., & Pugh, S.D. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology, 90*, 629–643.
- Bartlett, D. (2003). Management and business ethics: A critique and integration of ethical decision-making models. *British Journal of Management, 14*, 223–235.
- Beehr, T.A., & Glazer, S. (2005). Organizational role stress. In J. Barling, E.K. Kelloway, & M.R. Frone (Eds.), *Handbook of work stress* (pp. 7–33). Thousand Oaks, CA: Sage.
- Bennett, R.J., & Robinson, S.L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*, 349–360.
- Berry, C.M., Ones, D.S., & Sackett, P.R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology, 92*, 410–424.
- Bies, R.J., & Tripp, T.M. (1996). Beyond distrust: "Getting even" and the need for revenge. In R.M. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 246–260). Newbury Park, CA: Sage.
- Blau, G., & Andersson, L. (2005). Testing a measure of instigated workplace incivility. *Journal of Occupational and Organizational Psychology, 78*, 595–614.
- Bordia, P., Restubog, S.L.D., & Tang, R.L. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. *Journal of Applied Psychology, 93*, 1104–1117.
- Brown, R. (2000). *Group processes* (2nd edn.). Oxford: Blackwell.

- Bruk-Lee, V., & Spector, P.E. (2006). The social stressors-counterproductive work behaviors link: Are conflicts with supervisors and coworkers the same? *Journal of Occupational Health Psychology, 11*, 145–156.
- Bushman, B.J., & Anderson, C.A. (2001). Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychological Review, 108*, 273–279.
- Cohen-Charash, Y., & Spector, P.E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes, 86*, 278–321.
- Colquitt, J.A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*, 386–400.
- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C.O.L.H., & Ng, K.Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86*, 425–445.
- Colquitt, J.A., & Shaw, J.C. (2005). How should organizational justice be measured? In J. Greenberg & J.A. Colquitt (Eds.), *Handbook of organizational justice* (pp. 113–152). Mahwah, NJ: Lawrence Erlbaum.
- Costa, P.T., McCrae, R.R., & Dye, D.A. (1991). Facet scales for agreeableness and conscientiousness: A revision of the NEO Personality Inventory. *Personality and Individual Differences, 12*, 887–898.
- Cropanzano, R., Byrne, Z.S., Bobocel, D.R., & Rupp, D.E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior, 58*, 164–209.
- Douglas, S.C., & Martinko, M.J. (2001). Exploring the role of individual differences in the prediction of workplace aggression. *Journal of Applied Psychology, 86*, 547–559.
- Edwards, J.R., Caplan, R.D., & van Harrison, R. (1998). Person-environment fit theory. In C.L. Cooper (Ed.), *Theories of organizational stress* (pp. 28–67). Oxford: Oxford University Press.
- Epstein, S. (1998). Cognitive-experiential self-theory. In D.F. Barone, M. Hersen, & V.B. van Hasselt (Eds.), *Advanced personality* (pp. 211–238). New York: Plenum.
- Fox, S., Spector, P.E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior, 59*, 291–309.
- Frese, M., & Fay, D. (2001). Personal initiative (PI): An active performance concept for work in the 21st century. *Research in Organizational Behavior, 23*, 133–187.
- Griffin, R.W. (1987). Toward an integrated theory of task design. *Research in Organizational Behavior, 9*, 79–120.
- Haslam, S.A. (2004). *Psychology in organizations: The social identity approach* (2nd edn.). London: Sage.
- Haslam, S.A., & Ellemers, N. (2005). Social identity in industrial and organizational psychology: Concepts, controversies, and contributions. *International Review of Industrial and Organizational Psychology, 20*, 39–118.
- Haslam, S.A., O'Brien, A., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, social support, and the experience of stress. *British Journal of Social Psychology, 44*, 355–370.

- Hershcovis, M.S., Turner, N., Barling, J., Arnold, K.A., Dupré, K.E., Inness, M., LeBlanc, M.M., & Sivanathan, N. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology, 92*, 228–238.
- Hoel, H., Zapf, D., & Cooper, C.L. (2002). Workplace bullying and stress. *Research in Occupational Stress and Well Being, 2*, 293–333.
- Hofmann, D.A., Morgeson, F.P., & Gerras, S.J. (2003). Climate as a moderator of the relationship between leader–member exchange and content specific citizenship: Safety climate as an exemplar. *Journal of Applied Psychology, 88*, 170–178.
- Ilgel, D.R., & Hollenbeck, J.R. (1991). The structure of work: Job design and roles. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd edn., Vol. 2, pp. 165–207). Palo Alto, CA: Consulting Psychologists Press.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D., & Rosenthal, R.A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: Wiley.
- Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd edn.). New York: Wiley.
- Kreiner, G.E., & Ashforth, B.E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior, 25*, 1–27.
- Lee, T.W., Mitchell, T.R., Sablinski, C.J., Burton, J.P., & Holtom, B.C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. *Academy of Management Journal, 47*, 711–722.
- Marcus-Newhall, A., Pedersen, W.C., Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: A meta-analytic review. *Journal of Personality and Social Psychology, 78*, 670–689.
- Meara, H. (1974). Honor in dirty work. *Sociology of Work and Occupations, 1*, 259–283.
- Meier, L.L., Semmer, N.K., & Hupfeld, J. (2009). The impact of unfair treatment on depressive mood: The moderating role of self-esteem level and self-esteem instability. *Personality and Social Psychology Bulletin, 35*, 643–655.
- Meyer, J.P., Becker, T.E., & van Dick, R. (2006). Social identities and commitments at work: Toward an integrative model. *Journal of Organizational Behavior, 27*, 665–683.
- Morrison, E.W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal, 37*, 1543–1567.
- Morrison, E.W., & Robinson, S.L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review, 22*, 226–256.
- Motowidlo, S., Manning, R.R., & Packard, J.S. (1986). Occupational stress: Its causes and consequences for job performance. *Journal of Applied Psychology, 71*, 618–629.
- Niehoff, B.P., & Moorman, R.H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal, 36*, 527–556.

- Nunnally, J.C., & Bernstein, I.C. (1994). *Psychometric theory*. New York: McGraw-Hill.
- Ostendorf, F. (1990). *Sprache und Persönlichkeitsstruktur: Zur Validität des Fünf-Faktoren-Modells der Persönlichkeit* [Language and personality structure: On the validity of the five-factor model of personality]. Regensburg, Germany: Roderer.
- Peeters, M.C.W., Schaufeli, W.B., & Buunk, B.P. (1995). The role of attributions in the cognitive appraisal of work-related stressful events: An event-recording approach. *Work and Stress*, 9, 463–474.
- Rizzo, J.R., House, R.J., & Lirtzman, S.I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150–163.
- Robinson, S.L., & Bennett, R.J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555–572.
- Sabo, K. (1990). Protecting the professional role: A study to review non-nursing activities and recommendations for change. *Canadian Journal of Nursing Administration*, 3, 15–18.
- Salgado, J.F. (2002). The big five personality dimensions and counterproductive behaviors. *International Journal of Selection and Assessment*, 10, 117–125.
- Schallberger, U., & Venetz, M. (1999). Kurzversionen des MRS Inventars von Ostendorf (1990) zur Erfassung der fünf “grossen” Persönlichkeitsfaktoren [Brief versions of Ostendorf’s MRS inventory for the assessment of the Big-Five personality factors]. Universität Zürich, Switzerland: *Berichte aus der Abteilung Angewandte Psychologie*, 30, 1–51.
- Schaufeli, W.B. (2006). The balance of give and take: Toward a social exchange model of burnout. *International Review of Social Psychology*, 19, 87–131.
- Schmitt, M., & Dörfel, M. (1999). Procedural injustice at work, justice sensitivity, job satisfaction and psychosomatic well-being. *European Journal of Social Psychology*, 29, 443–453.
- Sedikides, C., & Strube, M.J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In M.P. Zanna (Ed.), *Advances in experimental social psychology*, 29, 209–269. New York: Academic Press.
- Semmer, N.K. (2000). Control at work: Issues of specificity, generality, and legitimacy. In W.J. Perrig & A. Grob (Eds.), *Control of human behavior, mental processes, and consciousness* (pp. 555–574). Mahwah, NJ: Erlbaum.
- Semmer, N.K., Jacobshagen, N., & Meier, L.L. (2006). Arbeit und (mangelnde) Wertschätzung [Work and (lack of) appreciation]. *Wirtschaftspsychologie*, 8, 87–95.
- Semmer, N.K., Jacobshagen, N., Meier, L.L., & Elfering, A. (2007). Occupational stress research: The “Stress-As-Offense-to-Self” perspective. In J. Houdmont & S. McIntyre (Eds.), *Occupational health psychology: European perspectives on research, education and practice* (Vol. 2, pp. 43–60). Castelo da Maia, Portugal: ISMAI Publishing.
- Semmer, N.K., Jacobshagen, N., Meier, L.L., & Elfering, E. (2010). Illegitimate tasks as a source of stress. Manuscript submitted for publication.

- Semmer, N., & Schallberger, U. (1996). Selection, socialization, and mutual adaptation: Resolving discrepancies between people and their work. *Applied Psychology: An International Review*, *45*, 263–288.
- Semmer, N.K., Zapf, D., & Greif, S. (1996). “Shared job strain”. A new approach for assessing the validity of job stress measurements. *Journal of Occupational and Organizational Psychology*, *69*, 293–310.
- Shore, L.M., & Tetrick, L.E. (1994). The psychological contract as an explanatory framework in the employment relationship. *Trends in Organizational Behavior*, *1*, 91–109.
- Siegrist, J. (2002). Effort–reward imbalance at work and health. *Research in Occupational Stress and Well Being*, *2*, 261–291.
- Skarlicki, D.P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, *82*, 434–443.
- Sluss, D.M., & Ashforth, B.E. (2007). Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review*, *32*, 9–32.
- Sonnentag, S., & Frese, M. (2003). Stress in organizations. In W.C. Borman, D.R. Ilgen, & R.J. Klimoski (Eds.), *Handbook of psychology, Vol. 12: Industrial and organizational psychology* (pp. 453–491). Hoboken, NJ: Wiley.
- Spector, P.E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, *12*, 269–292.
- Spector, P.E., & Jex, S.M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, *3*, 356–367.
- Stets, J.E. (2005). Examining emotions in identity theory. *Social Psychology Quarterly*, *68*, 39–74.
- Stryker, S., & Burke, P.J. (2000). The past, present, and future of an identity theory. *Social Psychology Quarterly*, *63*, 284–297.
- Thoits, P.A. (1991). On merging identity theory and stress research. *Social Psychology Quarterly*, *54*, 101–112.
- Tourish, D., & Robson, P. (2006). Sensemaking and the distortion of critical upward communication in organizations. *Journal of Management Studies*, *43*, 711–730.
- Van Yperen, N.W. (1996). Communal orientation and the burnout syndrome among nurses: A replication and extension. *Journal of Applied Social Psychology*, *26*, 338–354.
- Warr, P. (2007). *Work, happiness, and unhappiness*. Mahwah, NJ: Lawrence Erlbaum.
- Wrzesniewski, A., & Dutton, J.E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*, 179–201.