Journal of Occupational and Organizational Psychology (2007), 80, 665–691 © 2007 The British Psychological Society



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# Doing good, doing harm, being well and burning out: The interactions of perceived prosocial and antisocial impact in service work

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Service employees often perceive their actions as harming and benefiting others, and these perceptions have significant consequences for their own well-being. We conducted two studies to test the hypothesis that perceptions of benefiting others attenuate the detrimental effects of perceptions of harming others on the well-being of service employees. In Study I, a survey of 377 transportation service employees and 99 secretaries, perceived prosocial impact moderated the negative association between perceived antisocial impact and job satisfaction, such that the association decreased as perceived prosocial impact increased. In Study 2, a survey of 79 school teachers, perceived prosocial impact moderated the association between perceived antisocial impact and burnout, and this moderated relationship was mediated by moral justification; the results held after controlling for common antecedents of burnout. The results suggest that perceptions of benefiting others may protect service employees against the decreased job satisfaction and increased burnout typically associated with perceptions of harming others. Implications for research on burnout, job satisfaction, positive organizational scholarship and job design are discussed.

'Once in a while I've saved people by doing CPR... That made me feel great. I saved a little baby. And I've lost people, too. I've lost more than I've saved... It's not easy to carry those memories. But when you help someone, that makes up for everything that's rough.' Firefighter (Smith, 1988: 249)

Employee well-being is of perennial interest to scholars and practitioners. Typically studied in terms of job satisfaction and burnout, well-being has been linked to important individual and organizational outcomes, including life satisfaction (Heller, Judge, & Watson, 2002), physical health and longevity (Melamed, Shirom, Toker, Berliner, &

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Shapira, 2006), absenteeism (Firth & Britton, 1989; Spector, 1997), and job performance and organizational citizenship behaviour (Cropanzano, Rupp, & Byrne, 2003). In recent years, organizational scholars have recognized that it is particularly critical to study the well-being of service employees (e.g. Cascio, 1995, 2003; Parker, Wall, & Cordery, 2001). Across occupational sectors, burnout is the most prevalent among human service employees (Maslach, Schaufeli, & Leiter, 2001). In addition to harming their health, burnout undermines the ability of service employees to protect and promote human well-being by providing health care, law enforcement, transportation, and many other services (Halbesleben & Buckley, 2004). This problem is especially significant given that the vast majority of employees in European and American workforces now perform service jobs, and the service sector continues to have the highest rate of job growth of all sectors in both Europe and the United States (Bureau of Labor Statistics, 2001; European Commission, 2004).

Researchers have discovered that burnout is particularly common in service jobs as a result of chronic exposure to emotionally intense work with people (Dormann & Zapf, 2004; Maslach & Jackson, 1981; Zapf, 2002) and 'frequent and intense client-patient interactions' (Lee & Ashforth, 1996: 123) that bring about a series of interpersonal stressors (Maslach, 1976). Researchers have learned a great deal about these stressors, which include high job demands coupled with low control and a lack of social support, emotion regulation requirements, and difficult, frustrating social interactions (for reviews, see Cordes & Dougherty, 1993; Halbesleben & Buckley, 2004; Maslach et al., 2001; Zapf, 2002).

An important interpersonal stressor that contributes to decreased well-being in service occupations is the experience of harming the beneficiaries of one's work - the very people employees' jobs are designed to help (Molinsky & Margolis, 2005). For example, researchers have shown that physicians experience distress after causing medical errors that harm patients (Gallagher, Waterman, Ebers, Fraser, & Levinson, 2003; Halpern, 2001; Hammer, 1985), and firefighters experience considerable guilt as a result of doing harm rather than good to fire victims (Fullerton, McCarroll, Ursano, & Wright, 1992). However, existing research provides little theoretical and practical insight into what organizations can do to enable service employees to cope with the sometimes inevitable harm they do unto others. The purpose of this article is to empirically examine the relationships between the experiences of harming others, benefiting others, and job satisfaction and burnout in service work. We seek to theoretically develop and empirically test the hypothesis that the well-being costs of harming others can be offset by the experience of benefiting others, and to examine a psychological mechanism that may account for this pattern. To do so, we conducted two studies of transportation service employees, secretaries and high school teachers. Our results suggest that the experience of benefiting others may protect service employees against the decreased job satisfaction and increased burnout associated with the experience of harming others.

# Perceived impact

Although psychologists and organizational scholars have extensively studied behaviours that affect others, existing research focuses on the targets of the behaviours rather than the actors themselves. Recently, scholars have begun to fill this gap by calling attention to the importance of employees' perceptions of the impact of their actions on others for affecting their own well-being (Grant, in press;

Molinsky & Margolis, 2005). To capture these perceptions, scholars have defined perceived impact as the judgment that one's actions have consequences for the welfare of other people (Grant, 2007). However, this definition fails to specify the valence of the consequences for other people - whether they are beneficial or harmful. We distinguish between these two perceptions by defining perceived prosocial impact as the subjective experience of benefiting others and perceived antisocial impact as the subjective experience of harming others. This definition implies that the two constructs share a focus on social impact and perceptions. A focus on social impact is important because social impact signifies the meaning that people attach to their behaviours as mattering in the social world (e.g. Elliott, Colangelo, & Gelles, 2005; Paine, 2003). A focus on perceptions is important because perceptions are the lens through which employees process, appraise and make sense of their experiences (e.g. Smith & Ellsworth, 1985), and workplace events influence employee well-being by affecting employees' perceptions (e.g. Hackman & Oldham, 1976; Sonnentag & Zijlstra, 2006; Weiss & Cropanzano, 1996). Because occupational, organizational and national cultures vary in their conceptualizations of benefit and harm (e.g. Fineman, 2006), different employees may perceive the same actions in different ways. In light of the centrality of perceptions in sensemaking and wellbeing, as well as the social construction of benefit and harm, employees' perceptions of the impact of their actions on others - rather than the objective impact of their actions on others - are worthy of study.

Although it may initially appear that the two constructs are opposite poles of one continuum, we predicted that perceived prosocial and antisocial impacts lie on separate continua, much like positive and negative emotions (e.g. Cacioppo & Berntson, 1994). We based this prediction on research indicating that perceptions of positivity and negativity in interpersonal relationships are independent, rather than mutually exclusive (e.g. Finch, Okun, Barrera, Zautra, & Reich, 1989). This research shows that people do perceive some interpersonal relationships as uniformly positive and beneficial, and other relationships as uniformly negative and detrimental. However, people perceive many interpersonal relationships as being simultaneously beneficial and detrimental, and other relationships as having no benefits or drawbacks (Uchino, Holt-Lunstad, Smith, & Bloor, 2004; Uchino, Holt-Lunstad, Uno, & Flinders, 2001). These findings suggest that rather than judging interpersonal relationships as either beneficial or detrimental, people form separate perceptions of interpersonal relationships as beneficial and/or detrimental.

Applying this logic to experiences of benefiting and harming others, there are at least two ways in which perceptions of prosocial and antisocial impact can vary independently (Molinsky & Margolis, 2005). First, employees often carry out actions that simultaneously benefit and harm others. For example, when a nurse gives a vaccine to a child, the child benefits from the inoculation but may be harmed emotionally and physically by the pain of the shot. Second, employees can perceive prosocial impact in some experiences, events, activities and interactions, and perceive antisocial impact in other experiences, events, activities and interactions. For example, an emergency room physician may perceive prosocial impact after saving a patient's life one afternoon and perceive antisocial impact after losing another patient later in the week. As such, employees' perceptions of prosocial and antisocial impact may draw on different experiences. Employees can thereby be described by one of four perceived impact profiles, representations of their combined perceptions of antisocial and prosocial impact: low perceived impact (low antisocial,

low prosocial), aversive perceived impact (high antisocial, low prosocial), beneficial perceived impact (low antisocial, high prosocial) and conflicted perceived impact (high antisocial, high prosocial). We thus predict that perceptions of prosocial and antisocial impact occupy separate continua.

Hypothesis 1. Perceived prosocial impact and perceived antisocial impact are distinct perceptions, rather than two poles of one continuum.

# Perceived impact and well-being

Employee well-being refers to the quality of subjective experience at work (e.g. Danna & Griffin, 1999). The two indicators of well-being in this research, job satisfaction and burnout, lie at the positive and negative ends of the subjective experience continuum, respectively (e.g. Pomaki, Maes, & ter Doest, 2004; Zapf, 2002). Job satisfaction is defined as 'an evaluative judgment... about one's job or job situation' (Weiss, 2002, pp. 175; see also Spector, 1997). To define burnout, the influential research of Maslach and colleagues has advanced a tripartite conceptualization of emotional exhaustion, depersonalization and reduced efficacy (e.g. Maslach et al., 2001), where emotional exhaustion is the experience of low energy and fatigue, depersonalization is the experience of cynicism and psychological distancing from interpersonal relationships and reduced efficacy is the experience of decreased personal accomplishment. However, there exists a debate as to whether reduced efficacy is a dimension of burnout or an antecedent or consequence of burnout (e.g. Best, Stapleton, & Downey, 2005; Halbesleben & Buckley, 2004; Kalliath, 2000; Shirom, 1989, 2003). In light of metaanalyses suggesting that emotional exhaustion and depersonalization are the core dimensions of burnout (Lee & Ashforth, 1996), and evidence that reduced efficacy may be more appropriately modelled as a consequence of these two dimensions (Cordes, Dougherty, & Blum, 1997), we focus on emotional exhaustion and depersonalization as indicators of burnout.

#### Perceived antisocial impact and well-being

We predicted that perceived antisocial impact is negatively associated with well-being. Harming others constitutes a violation of the moral order of Western societies (e.g. Eisenberg, 2000; Haidt, 2001; Milgram, 1974; Schwartz & Bardi, 2001) and typically causes employees to experience psychological distress, guilt and performance anxiety (Folger & Skarlicki, 1998; Fullerton *et al.*, 1992; Gallagher *et al.*, 2003; Kets de Vries & Balazs, 1997; Molinsky & Margolis, 2005). In service occupations, employees' core goals and objectives are defined in terms of helping others. When service employees perceive antisocial impact, they are aware that they have harmed the very people their jobs are designed to help. Perceived antisocial impact is thus likely to be associated with decreased job satisfaction and increased burnout.

We derived the logic for the linkage between perceived antisocial impact and decreased job satisfaction from attribution theory (e.g. Heider, 1958; McGraw, 1987). Attribution theory suggests that when employees feel that they have harmed others, they experience cognitive dissonance about violating personal, occupational and social standards, and seek to externalize responsibility for the harm (Folger & Skarlicki, 1998; Weiner, 1985). They can do so by blaming their jobs; as such, they are likely to feel less satisfied with jobs that require them to harm others. Accordingly, attribution theory

suggests that when employees perceive antisocial impact, they seek to make external attributions for the noxious experience of causing harm. By attributing the harm to the nature of their jobs, employees are able to justify their personal actions, but come to feel dissatisfied working in jobs that require them to cause harm.

Hypothesis 2a. Perceived antisocial impact is negatively associated with job satisfaction.

We derived the logic for the linkage between perceived antisocial impact and increased burnout from theory and research on emotional experience in harmdoing (e.g. Kets de Vries & Balazs, 1997; Molinsky & Margolis, 2005), which shows that the experience of harming others is associated with both emotional exhaustion and depersonalization. For example, research indicates that physicians and nurses experience stress, depression and trauma symptoms as a result of making medical errors, such as incorrect diagnoses and medication administration, that undermine patient health rather than improving it (e.g. Borrell-Carriö & Epstein, 2004; Casarett & Helms, 1999; Rassin, Kanti, & Silner, 2005). Specifically, harming others prompts employees to experience guilt; attempts to manage these emotions, combined with anxiety about causing further harm, bring about feelings of emotional exhaustion (Kets de Vries & Balazs, 1997; Molinsky & Margolis, 2005). Moreover, in order to protect themselves from these feelings, employees seek out psychological distance and detach themselves from interpersonal relationships, resulting in a sense of depersonalization (Folger & Skarlicki, 1998; Molinsky & Margolis, 2005). Based on these lines of reasoning, We predicted that perceived antisocial impact is negatively associated with job satisfaction and positively associated with burnout.

Hypothesis 2b. Perceived antisocial impact is positively associated with burnout.

# The moderating role of perceived prosocial impact

We now turn to our central hypothesis that the experience of benefiting others protects employees against the well-being costs of the experience of harming others. Recently, organizational scholars studying two different problems from two different theoretical perspectives have suggested that the experience of benefiting others can enable service employees to cope with the experience of harming others. In developing a theoretical framework to explain how employees construct positive identities in stigmatized work, Ashforth and Kreiner (1999) proposed that service employees are able to justify doing harm to others by reframing, recalibrating and refocusing their attention to the ways in which their jobs are beneficial to others, thereby avoiding distress (see also Ashforth & Anand, 2003). Similarly, in a conceptual paper exploring how employees cope with 'necessary evils', tasks that require harming others in the interest of a perceived greater good, Molinsky and Margolis (2005) proposed that causing harm is more justifiable and less distressing when employees experience their actions as benefiting others. While appealing intuitively, these claims have not yet been theoretically developed nor empirically tested. We propose that perceived prosocial impact moderates the relationship between perceived antisocial impact and well-being. As will be elaborated below, the logic behind this claim is that when employees experience their actions as benefiting others, they are able to justify the experience of harming others. This protects against decreased job satisfaction by enabling employees to feel satisfied by the opportunities that their jobs provide to benefit others (e.g. Hackman & Oldham, 1976).

This also protects against burnout by enabling employees to avoid guilt and anxiety, as employees feel that the harm is justified by a greater good (e.g. Darley & Pittman, 2003).

To develop this hypothesis in further depth, we integrate theoretical perspectives on moral identity (e.g. Aquino & Reed, 2002) and cognitive dissonance (e.g. Elliot & Devine, 1994; Festinger, 1957). The core premise of the moral identity perspective is that people are motivated to develop and maintain self-concepts as good human beings (Reed & Aquino, 2003; Schwartz & Bardi, 2001). When employees cause harm to others, their actions conflict with these moral identities, and they experience cognitive dissonance. To reduce dissonance and sustain their moral identities, employees seek to rationalize and justify their antisocial impact (e.g. Weick, 1995; Wong & Weiner, 1981). We propose that in order to do so, employees engage in a process of moral justification. We define *moral justification* as the act of rationalizing doing harm to others by focusing on the benefits of one's actions to others. To illustrate, public defenders who often fight for the freedom of guilty criminals engage in moral justification by focusing on how their work protects the constitutional rights of innocent victims (Ashforth & Kreiner, 1999).

Perceived prosocial impact provides employees with a moral justification for doing harm. The logic behind this argument is that employees develop a sense of moral capital, using utilitarian reasoning to keep an informal tally of the ratio of benefit to harm caused by their actions (e.g. Fritzsche & Becker, 1984; Premeaux & Mondy, 1993). Doing good provides a form of 'idiosyncrasy credit' (Hollander, 1958) in repaying other people or society for harm caused. In other words, by benefiting others, employees develop credentials that sustain their moral identities (Monin & Miller, 2001). Perceived prosocial impact thereby serves as a psychological resource (Hobfoll, 2002) for dissonance reduction. Perceived prosocial impact provides a moral justification that enables employees to rationalize harm as serving a greater good (Bandura, 1999; Osofsky, Bandura, & Zimbardo, 2005), reducing the cognitive dissonance, guilt and anxiety typically associated with causing harm to others, thereby protecting against decreased job satisfaction and increased burnout. Thus, we predicted that perceived prosocial impact moderates the association between perceived antisocial impact and well-being, such that the association weakens as employees perceive higher levels of prosocial impact and are thereby able to draw on moral justifications for doing harm.

Hypothesis 3a. Perceived prosocial impact moderates the relationship between perceived antisocial impact and job satisfaction, such that the negative association between perceived antisocial impact and job satisfaction decreases as perceived prosocial impact increases.

Hypothesis 3b. Perceived prosocial impact moderates the relationship between perceived antisocial impact and burnout, such that the positive association between perceived antisocial impact and burnout decreases as perceived prosocial impact increases.

Hypothesis 4. Moral justification mediates the relationship between the interaction of perceived prosocial and antisocial impact and employee well-being.

# STUDY 1: JOB SATISFACTION

The purpose of this study is to test Hypotheses 1, 2a and 3a, with the principal goal of examining whether the subjective experience of benefiting others moderates the association between the subjective experience of harming others and job satisfaction in service work.

#### Method

## Participants and procedures

To test these hypotheses, we recruited two samples of participants from two occupations in three service organizations. Across the samples, managers introduced the research as a confidential, anonymous study of job satisfaction, and asked for volunteers to participate. The first sample was a group of 377 employees from a transportation services company (mean tenure = 2.69 years, SD = 3.60 years, 91% male) in the Midwestern United States. The employees were responsible for making sales and delivering products and services to customers. They completed surveys anonymously at a regional office and submitted them in a box, which was picked up by the research team. Interviews with managers indicated that the company took pride in building and maintaining strong customer relationships. Managers explained that typical prosocial impacts involved delivering valued goods and services to customers, giving customers special deals, and completing shipments and deliveries ahead of schedule, and typical antisocial impacts involved shipping and delivering wrong or inferior products, charging unexpected expenses to customers, and completing shipments and deliveries behind schedule.

The second sample consisted of 99 secretaries (mean tenure = 8.61 years, SD = 8.54years, 96% female) in the Midwestern United States. The secretaries were recruited in spring 2004 from two different organizations: a public university (N = 62) and a corporate law firm (N = 37). The secretaries at the public university were primarily responsible for providing student and faculty support in literature, science and arts departments. Employees received an electronic recruiting message, completed surveys on their own time and submitted them to the research team via e-mail. Personal identifiers were removed immediately. Interviews with managers suggested that typical examples of prosocial impact for the secretaries included helping students with finances and coursework, providing valuable support and assistance to faculty members, and volunteering to train co-workers in new skills and technologies. Typical antisocial impacts reported included enforcing rules that negatively affect students, completing assignments incorrectly or late, and being uncooperative with faculty members, co-workers and students. The secretaries at the corporate law firm worked with partners, junior lawyers, paralegals and clients. A researcher distributed hard copies of the survey along with self-addressed, stamped envelopes; participants mailed surveys anonymously to the researcher. Interviews with managers at the law firm suggested that typical prosocial impacts for the secretaries included doing excellent work that saved attorneys time, solving clients' problems and helping co-workers with heavy workloads, and typical antisocial impacts included disappointing attorneys by doing inferior or slow work and treating difficult clients rudely.

#### Measures

All items used a 7-point Likert-type response scale anchored at 1 = disagree stronglyand 7 = agree strongly.

## Job satisfaction

Job satisfaction was measured with the 4-item scale developed by Quinn and Shepard (1974; see also Eisenberger, Cummings, Armeli, & Lynch, 1997).

#### Perceived impact

We developed three items to measure perceived antisocial impact: 'My work really makes others' lives worse'; 'I have negative impact on others in my work on a regular basis' and 'My work has negative impact on many people'. We also developed three items to measure perceived prosocial impact: 'My work really makes others' lives better'; 'I have positive impact on others in my work on a regular basis' and 'My work has positive impact on a large number of people'. We developed these general items on the basis of both pilot research and existing research. First, we conducted pilot interviews with managers and employees asking them to describe how their actions harm and benefit others. We formulated item stems based directly on the terms that they used to describe their impact. Second, we consulted existing measures of related constructs of contributing to others (Keyes, 1998; McAdams & de St. Aubin, 1992) and task significance (Hackman & Oldham, 1975), and used the wording of these measures to provide guidelines for strengthening our items.

## Data analysis

To asses our hypotheses, we conducted two sets of analyses. To test Hypothesis 1 that perceived prosocial impact and perceived antisocial impact are distinct, we followed the steps recommended in the measurement literature (e.g. Bentler & Dudgeon, 1996; Kline, 1998). We began by conducting an exploratory factor analysis using principal axis factoring with maximum likelihood estimation procedures and an oblique rotation. To provide a more rigorous examination of this hypothesis, we then conducted a confirmatory factor analysis using structural equation modelling in EQS software version 6.1 with maximum likelihood estimation procedures.

To test Hypotheses 2a and 3a, that perceived antisocial impact is negatively associated with job satisfaction and that perceived prosocial impact moderates this association, we conducted hierarchical OLS regression analyses following the procedures recommended by Aiken and West (1991; see also Cohen, Cohen, West, & Aiken, 2003). We began by centring the perceived antisocial impact and perceived prosocial impact variables, subtracting their means, and then multiplied the two centred variables to create a continuous interaction term. In the first step of the regression, we entered a dummy variable of occupational category (1 = transportation services, 2 = secretarial). In the second step, we entered the centred perceived antisocial impact and perceived prosocial impact variables. In the third step, we entered the interaction term representing the product of the two perceived impact variables.

# Results

Means, standard deviations, reliability coefficients and correlations for the measures appear in Table 1. Consistent with the hypothesis that perceived prosocial and antisocial impact would load onto separate factors, an exploratory factor analysis revealed a two-factor solution (eigenvalues = 2.48 and 1.67, respectively). The two factors explained 69.06% of the variance, and the loadings are displayed in Table 2. For the confirmatory factor analysis, the model, which is depicted in Figure 1, displayed excellent fit with the data,  $x^2(8) = 17.39$ , NNFI = .97, CFI = .99, SRMR = .043, RMSEA = .055, RMSEA confidence interval (.018, .090). The correlation coefficient of -.22 for the latent perceived prosocial and antisocial impact factors indicates that the two perceptions share less than 5% of their variance, supporting Hypothesis 1.

Turning to Hypotheses 2a and 3a, the results of OLS regression analyses are displayed in Table 3. Perceived antisocial impact was negatively associated with job satisfaction (supporting Hypothesis 2a), perceived prosocial impact was positively associated with job

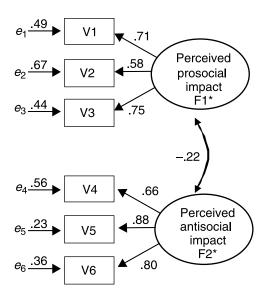
Table 1. Study	I	Means,	standard	deviations,	and	correlations	for	secretaries	and	transportation
employees										

	Mean	SD	I	2	3
I. Job satisfaction	5.34	1.19	(.82)		
2. Perceived antisocial impact	1.88	0.99	−.25***	(.83)	
3. Perceived prosocial impact	5.23	1.05	.40***	I6**	(.71)

Notes. Coefficient alpha values appear across the diagonal in parentheses. \*p < .05, \*\*p < .01, \*\*\*p < .001. To ensure that it was appropriate to combine the samples, we conducted multivariate analyses of variance by occupation and organization on each item using Scheffe's multiple comparison test. These analyses showed no statistically significant differences on the study variables.

Table 2. Study I Principal axis factor analysis

Item	Perceived antisocial impact	Perceived prosocial impact
Perceived antisocial impact I	.66	.00
Perceived antisocial impact 2	.87	0I
Perceived antisocial impact 3	.80	.00
Perceived prosocial impact I	<b>09</b>	.66
Perceived prosocial impact 2	<b>04</b>	.55
Perceived prosocial impact 3	.13	.84



Notes. x<sup>2</sup> (8) = 17.39, NNFI = .97, CFI = .99, SRMR = .043, RMSEA = .055, RMSEA confidence interval (.018, .090). All reported relationships are statistically significant at the p < .05 level.

Figure 1. Study 1 Confirmatory factor analysis of perceived impact items.

satisfaction, and the interaction term was positively associated with job satisfaction. To facilitate the interpretation of the interaction, we plotted the simple slopes at one standard deviation above and below the mean of perceived prosocial impact (see Figure 2). In support of Hypothesis 3a, perceived antisocial impact was significantly associated with job satisfaction only when perceived prosocial impact was low (r = -.29, p = .01), but not when perceived prosocial impact was high (r = .05, p = .70).

Table 3. Study I	OLS regressions	s of job satisfaction	on perceived	l antisocial and	d prosocial	impacts

	β Step I	β Step 2	β Step 3
Occupational type	<b>02</b>	<b>03</b>	<b>04</b>
Perceived antisocial impact		−. <b>I9</b> ***	19***
Perceived prosocial impact		.39***	.39***
Perceived impact interaction			.12**
Adjusted R <sup>2</sup>	.00	.21	.22

Notes. \*p < .05, \*\*p < .01, \*\*\*p < .001. Adjusted  $R^2$  increased significantly in Step 2, F(2, 435) = 59.46, p < .001, and in Step 3, F(1, 434) = 7.75, p < .01.

# **Discussion**

These findings are consistent with the hypotheses presented about the relationship between perceived impact and job satisfaction in service work. Perceptions of antisocial and prosocial impact appear to lie on separate continua, and perceived antisocial impact was negatively associated with job satisfaction. Perceived prosocial impact moderated this relationship, such that as perceived prosocial impact increased, the negative relationship between perceived antisocial impact and job satisfaction decreased. The results thus provide initial support for the hypothesis that perceived prosocial impact may protect against the negative association between perceived antisocial impact and job satisfaction in service work.

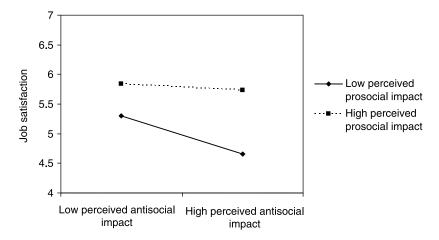


Figure 2. Study | Regression slopes.

#### STUDY 2: BURNOUT

Our second study is directed at testing Hypotheses 2b, 3b and 4. We seek to extend the findings of Study 1 by addressing three important limitations. First, in Study 1, we hypothesized that perceived prosocial impact would protect against the noxious effects of perceived antisocial impact by enabling employees to justify harming others. However, we did not directly test whether this justification mechanism mediated the relationships observed. Accordingly, in this study, we empirically examine whether perceived prosocial impact enables employees to justify harming others. Second, our overarching goal in Study 1 was to examine the role of perceived prosocial and antisocial impact in employee well-being, but we focused exclusively on job satisfaction as an indicator at the positive end of the well-being continuum. If our predictions are correct, a similar pattern of results should emerge for burnout, a subjective experience at the negative end of the well-being continuum. As such, in Study 2, we focus our theoretical and empirical attention on the role of perceived prosocial and antisocial impact in predicting burnout.

Third, in Study 1, we did not measure and control for other factors that have been shown to influence subjective experience at work. If the interaction between perceptions of prosocial and antisocial impact is to be of unique value in predicting and explaining subjective experiences such as job satisfaction and burnout, it is important to examine whether they explain variance in these outcomes above and beyond other key influences. As such, in Study 2, we control for job, organizational and individual factors previously shown to be important influences on burnout. At the job level, researchers have found that job demands, job control and workload are job characteristics linked directly to burnout (e.g. Halbesleben & Buckley, 2004; Maslach et al., 2001; Sonnentag, Brodbeck, Heinbokel, & Stolte, 1994; Spector & Jex, 1998). At the organizational level, environmental uncertainty significantly influences burnout (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). At the demographic level, marital status is shown to be among the strongest demographic predictors of burnout, with married employees experiencing lower levels of burnout than single employees (Cordes & Dougherty, 1993).

#### Method

#### Participants and procedures

In light of evidence that teaching is a human service occupation in which burnout is unusually common (Maslach et al., 2001), we recruited a sample of teachers to participate in this study. Seventy-nine secondary education teachers (mean tenure = 13.93 years, SD = 11.14 years, 59.5% female) from a large, upper/middle class suburban high school in the Midwestern United States volunteered to complete surveys. The teachers taught a variety of subjects, including regular education courses in math, natural sciences (e.g. physics, biology, chemistry), social sciences (e.g. political science, psychology, sociology, economics) and humanities (e.g. English, foreign languages, history, literature), as well as special education courses. The teachers completed surveys in fall 2004 during a staff development meeting on a day devoted entirely to staff development. A researcher visited the organization and asked for volunteers to participate in a study of the factors that affect burnout at work. All employees were informed that participation was voluntary and anonymous. Those who were willing to complete surveys submitted them directly to the researcher. The incentive for participation was that upon completion of the study, their aggregated data would be synthesized to offer recommendations to the organization's administration for improving the educators' experiences at work.

#### Measures

To gain a deeper understanding of how the teachers perceived their actions as having prosocial and antisocial impact, and to increase the probability that their perceptions would be grounded in concrete experiences (Weiss, 2002), the first section of the surveys presented teachers with the following instructions: 'We are interested in understanding how you experience the positive and negative impact that you have on others at work. By positive impact, we are referring to any action that benefits others. By negative impact, we mean any action that harms or negatively affects others'. The teachers were then asked to list three situations in which they felt they had a positive impact on others and three situations in which they felt they had a negative impact on others. The three most common categories listed in teachers' descriptions of prosocial impact were improving student learning and performance (78.48% of teachers), providing mentoring, advice, and social and emotional support to students (64.56%), and volunteering for, participating in, and organizing after-school student groups, clubs, activities and events (27.85%). The three most common categories listed in teachers' descriptions of antisocial impact were disciplining, reprimanding, embarrassing or speaking rudely to students during class (54.44% of teachers), failing students (37.97%) and delivering bad news to parents about their children, such as poor grades, behavioural problems or insufficient credits to graduate (22.78%).

For the quantitative items, to prevent response order effects (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, for a review), four versions of the survey instrument were administered, each identical in content but differing in arrangement of questions. Unless otherwise indicated, the items used a 7-point Likert-type scale anchored at 1 = disagree strongly and 7 = agree strongly.

#### Perceived impact

We measured perceived prosocial impact and perceived antisocial impact with the same items as in Study 1.

#### Burnout

We measured burnout with 13 items from the emotional exhaustion and depersonalization subscales of the Maslach Burnout Inventory (Maslach & Jackson, 1981). Consistent with prior research (e.g. Best  $et\ al.$ , 2005), we computed a mean of the subscales to represent burnout. The emotional exhaustion subscale includes items such as 'I feel burned out from my work' and the depersonalization subscale includes items such as 'I've become more callous towards people since I took this job'. Items measured the frequency, anchored at 0 = never and 6 = everyday, and intensity, anchored at 1 = to a very little extent and 7 = to a very great extent, of emotional exhaustion and depersonalization.

# Moral justification

We developed three items to measure moral justification: 'The fact that my work benefits others helps me cope with the negative aspects of it'; 'I am less affected by the

<sup>&</sup>lt;sup>1</sup> Comparisons of the counterbalanced surveys on the key variables of interest using Scheffe's multiple comparisons test revealed no significant differences.

downsides of my work when I am able to make a positive difference in others' lives' and 'The drawbacks of my work don't bother me as much because I have positive impact on others.

## Control variables

To minimize respondent burden, we used direct single items (Burisch, 1984) to measure job demands ('Many of the challenges I face at work are frustrating') and job control ('I have enough control at work to influence important outcomes'). We measured workload by asking participants to report the average number of hours they worked per week during the last month (Spector & Jex, 1998). We measured environmental uncertainty with three items adapted from scales discussed by Milliken (1987): 'I feel a sense of uncertainty in my job'; 'I can foresee what work-related situations will arise in the future' (reverse-scored) and 'I can accurately predict the outcomes of my decisions or co-workers' decisions' (reversescored). Finally, we measured marital status with a categorical question (single vs. married).

## Data analysis

We conducted two sets of analyses to test our hypotheses. First, as in Study 1, to test Hypotheses 2b and 3b, that perceived antisocial impact is positively associated with burnout and that perceived prosocial impact moderates this association, we conducted hierarchical OLS regression analyses according to the procedures suggested by Aiken and West (1991; see also Cohen et al., 2003). In addition to the five control variables discussed above, we included the product of centred job demands and job control variables based on evidence that the two variables interact to predict burnout (e.g. van Vegchel, de Jonge, Söderfeldt, Dormann, & Schaufeli, 2004). We centred the perceived antisocial and prosocial impact variables, multiplied them to create an interaction term, and regressed burnout on these three variables and the control variables of job demands and environmental uncertainty. Second, to examine whether moral justification mediated the moderated association between the perceived impact interaction and burnout, we followed the procedures for mediated moderation recommended by Muller, Judd, and Yzerbyt (2005).

# Results

Means, standard deviations, reliability coefficients and correlations for the quantitative measures appear in Table 4. It should be noted that perceived antisocial and prosocial impacts once again shared little variance (less than 8%). In light of this evidence supporting the independence of the two perceptions, we turned to OLS regressions to examine whether the control variables influenced burnout. The results, which are displayed in Table 5, indicated that two of the control variables, job demands and environmental uncertainty, were significant predictors of burnout. Because the other four control variables were not related to burnout in this sample, we excluded them from further analyses.

# Predicting burnout

The results, which are displayed in Table 6, support Hypothesis 2b by showing that perceived antisocial impact significantly predicted burnout after controlling for job demands and environmental uncertainty. Perceived prosocial impact and the interaction between perceived prosocial and antisocial impacts also significantly predicted

Table 4. Study 2 Means, standard deviations and correlations

	Mean	SD	_	2	3	4	5	9	7	8
I. Burnout 2. Perceived antisocial impact	69:1	1.22	(.95)	(70)						
3. Perceived prosocial impact	5.79	0.97	5 <b>4</b> ***	27*	(77.)					
4. Moral justification	5.52	1.30	<b>–.72</b> ***	33**	.51***	(98)				
5. Job demands	4.99	1.60	.34**	.23*	22*	40***	ı			
6 Job control	4.94	1.67	<u>8</u> -	=:-	.34**	.37**	34**	I		
7. Workload	51.80	12.04	10. –	90. –	02	<del>-</del> -	71.	<u>81.</u> –	ı	
8. Environmental uncertainty	3.15	1.25	.43***	.21	38**	—.39***	.28*	54***	.03	(.72)
9. Marital status	I	I	.05	.24*	00:	04	.02	=	<u>-0</u>	.20
										I

Notes. Coefficient alpha values appear across the diagonal in parentheses. \*p < .05, \*\*p < .01, \*\*\*p < .001.

Table 5. Study 2 OLS regressions of control variables on burnout

	β Burnout
Job demands	.30*
Job control	.12
Demand-control interaction	−. <b>02</b>
Workload	−. <b>0</b> 5
Environmental uncertainty	.42**
Marital status	<b>−.03</b>
Adjusted R <sup>2</sup>	.21

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

Table 6. Study 2 OLS regressions predicting burnout

	β Step I	β Step 2	β Step 3
Job demands	.23*	0.15	.19*
Environmental uncertainty	.36**	0.20*	.19*
Perceived antisocial impact		0.21*	.04
Perceived prosocial impact		− 0.37***	48***
Perceived impact interaction			−.37***
Adjusted R <sup>2</sup>	.23	0.38	.49

Notes. \*p < .05, \*\*p < .01, \*\*\*p < .001. Adjusted  $R^2$  increased significantly in Step 2, F(2, 73) = 11.19, p < .001, and Step 3, F(1, 72) = 16.05, p < .001.

burnout. To facilitate the interpretation of the significant interaction effect, we plotted the simple slopes at one standard deviation above and below the mean of perceived prosocial impact (see Figure 3). Perceived antisocial impact was associated with burnout only when perceived prosocial impact was low (r = .86, p < .01), but not when perceived prosocial impact was high (r = -.07, p = .78). Thus, our analyses provided support for Hypothesis 3b: perceived prosocial impact moderated the relationship between perceived antisocial

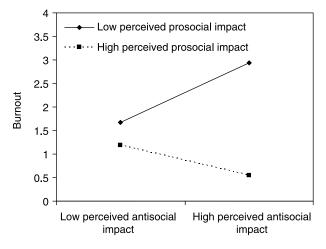


Figure 3. Study 2 Regression slopes.

impact and burnout, such that the association between perceived antisocial impact and burnout decreased as perceived prosocial impact increased.

# Mediated moderation analyses

The first criterion specified by Muller et al. (2005), for the interaction between the moderator and the independent variable to significantly predict the dependent variable, was met by our prior analyses showing that the interaction between perceived prosocial and antisocial impacts significantly predicted burnout (see Table 6, Step 3). The second criterion, for the interaction between the moderator and the independent variable to significantly predict the mediator, was met, as the interaction between perceived prosocial and antisocial impact significantly predicted moral justification (see Table 7). The third criterion, for the mediator to significantly predict the dependent variable while controlling for the interactions between (a) the moderator and the independent variable and (b) the moderator and the mediator, was also met: moral justification significantly predicted burnout while controlling for the two interactions (see Table 7). Thus, in support of Hypothesis 4, moral justification mediated the moderated relationship between perceived prosocial impact, perceived antisocial impact and burnout.

Table 7. Study 2 Mediated moderation analyses

	DV	Moral Justification	DV	Burnout
	β	t	β	t
Job demands	<b>-</b> .26	<b>− 2.76</b> **	.05	0.65
Environmental uncertainty	15	<b>- 1.51</b>	.13	1.62
Perceived antisocial impact	06	-0.53	.03	0.38
Perceived prosocial impact	.42	4.09***	23	<b>- 2.33</b> *
Perceived antisocial impact × perceived prosocial impact	.21	2.12*	<b>23</b>	<b>− 2.66</b> *
Moral justification			44	- 4.69***
Moral justification × perceived prosocial impact			.14	1.65

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

## **Discussion**

Together, the results support and extend the findings from Study 1. Perceived prosocial and antisocial impact once again shared little variance, providing consistent evidence that the two perceptions are distinct. Perceived prosocial impact moderated the relationship between perceived antisocial impact and burnout, such that the positive association decreased as perceived prosocial impact increased, even after controlling for job, environmental, and demographic variables shown to influence burnout in prior research. Moreover, moral justification mediated this moderated relationship, such that the protective role of perceived prosocial impact was partially accounted for by employees drawing on the benefits of their work to others to cope with their negative experiences. Thus, the results of this study serve to replicate and extend the results of Study 1 by showing similar moderation patterns in predicting burnout and job satisfaction, providing an initial test of the psychological mechanism responsible for this relationship and controlling for other influences to examine the incremental validity of perceived impact in predicting burnout.

#### GENERAL DISCUSSION

Taken together, the two studies reveal several important findings regarding the role of perceived impact in the well-being of service employees. First, we provided convergent evidence that perceived antisocial and prosocial impacts exist on separate continua rather than occupying opposing poles of a single perceived impact continuum. Second, across the two studies, we found that perceived prosocial impact moderated the relationship between perceived antisocial impact and well-being. Study 1 showed that among transportation services employees and secretaries, as perceived prosocial impact increased, the relationship between perceived antisocial impact and job satisfaction decreased. Study 2 showed the same pattern of results for burnout among high school teachers, even after controlling for job, environmental and demographic factors likely to affect burnout. Further, this study provided initial evidence regarding the psychological mechanisms that mediate this relationship, suggesting that perceived prosocial impact attenuates the association between perceived antisocial impact and burnout by enabling employees to morally justify doing harm. These results offer important contributions to research on burnout, job satisfaction, positive organizational scholarship and job design.

#### Theoretical contributions

#### **Burnout**

The first contribution of our research is to the burnout literature, where a wealth of evidence now demonstrates that burnout is a frequent result of stressful relationships with leaders, supervisors, co-workers, clients, customers and patients (e.g. Cordes & Daugherty, 1993; Lee & Ashforth, 1996; Maslach et al., 2001; Zapf, 2002). Comparatively little research has examined what can be done to enable employees to cope with these job stressors (Halbesleben & Buckley, 2004; Koeske, Kirk, & Koeske, 1993). Although researchers studying 'dirty work' (Ashforth & Kreiner, 1999) and 'necessary evils' (Molinsky & Margolis, 2005) have offered initial suggestions that perceptions of prosocial impact can enable employees to cope with their antisocial impact, few efforts have been made to theoretically develop and empirically test this proposition. Our studies both support and extend this proposition with evidence that perceptions of antisocial impact are not associated with higher levels of burnout when perceptions of prosocial impact are high. Accordingly, our research offers new insights into the predictors of burnout, illuminating how perceptions of prosocial impact may offset the relationship between perceptions of antisocial impact and burnout.

A principal contribution of these findings is in taking a step towards challenging traditional recommendations for reducing burnout in the well-being and stress literatures. Researchers typically underscore the importance of reducing job demands and increasing social support (for a review, see Halbesleben & Buckley, 2004). In effect, the implication is that burnout may be mitigated by reducing what employees give and increasing what they receive. Our findings offer preliminary clues that the opposite step may be appropriate when burnout is caused by the experience of doing harm: rather than decreasing opportunities for employees to give, organizations may consider increasing opportunities for employees to give. This may enable employees to cope with doing harm by helping employees understand the benefits of their actions to others. As such, our research begins to build a case for a novel and counter-intuitive approach to mitigating burnout.

# Job satisfaction

Second, our studies take a step towards advancing job satisfaction research, where researchers have amassed extensive evidence about how perceptions of interpersonal relationships and interactions can enhance or undermine job satisfaction. High job satisfaction often results from perceptions of positive treatment from leaders, supervisors, co-workers (Gerstner & Day, 1997; Repetti & Cosmas, 1991) and feeling supported by supervisors and co-workers (Bliese & Britt, 2001; Rhoades & Eisenberger, 2002). Low job satisfaction often results from perceptions of negative treatment from others, in the form of perceptions of unjust decision processes and outcomes (Colquitt, Conlon, Wesson, Porter, & Ng, 2001), disrespect (Cortina, Magley, Williams, & Langhout, 2001), and received aggression and harassment (Lapierre, Spector, & Leck, 2005). Common to these findings is a focus on employees as recipients of impact in interpersonal interactions and relationships - as beneficiaries of positive treatment from others and victims of negative treatment from others. In studying the role of perceptions of interpersonal interactions and relationships in job satisfaction, organizational researchers have paid relatively little attention to the ways in which perceptions of impacting others, not merely being impacted by others, affects employee job satisfaction. The studies presented here take a step towards redressing this gap by focusing on how employees' experiences of benefiting and harming others influence their own job satisfaction. Our findings shed light on the conditions under which harming others is more and less likely to harm employees, suggesting that perceptions of harming others are less detrimental to job satisfaction when employees perceive their actions as benefiting others. Accordingly, our research provides a more nuanced view of the relationship between interpersonal relationships and job satisfaction than has been offered in previous research.

# Positive organizational scholarship

Third, our studies contribute to the growing body of research on positive organizational scholarship (Cameron, Dutton, & Quinn, 2003) and positive organizational behaviour (Luthans, 2002; Wright, 2003). A core premise of these perspectives is that positive and negative states are independent, and thereby exert separate influences on employee well-being (e.g. Cameron et al., 2003; Roberts, 2006; cf. Fineman, 2006). Our results lend support to these assertions with evidence that perceptions of antisocial and prosocial impacts lie on separate continua and are independently and interactively associated with both job satisfaction and burnout. In fact, across both studies, the contributions of perceived prosocial impact to employee well-being significantly outweighed the contributions of perceived antisocial impact. This finding is surprising given the extensive evidence that individuals generally weigh negative information more heavily than positive information (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin & Royzman, 2001; Tversky & Kahneman, 1992) as well as findings that the negative effects of social hindrance on mental health significantly outweigh the positive effects of social support (Vinokur & van Ryn, 1993). Our results thus build on resilience and coping research, which indicates that positive experiences can enable individuals to cope with stressors (e.g. Lazarus & Folkman, 1984; Tennen, Affleck, & Armeli, 2000) and undo the detrimental effects of negative experiences (e.g. Hobfoll, 2002; Tugade & Fredrickson, 2004; Tugade, Fredrickson, & Feldman-Barrett, 2004). Our results suggest that perceived prosocial impact may play an important role in promoting the positive subjective experience of job satisfaction and preventing the negative subjective experience of burnout. These findings accentuate the value of examining how

positive and negative states exert both independent and interactive effects on employees' experiences.

## Job design

Finally, our research has significant implications for the job design literature, where researchers have treated the impact of a job on other people as a unidimensional construct labelled as task significance (e.g. Hackman & Oldham, 1976, 1980; Shamir & Salomon, 1985; Steers & Mowday, 1977). Researchers have focused on whether the job has an impact on other people, overlooking the valence of the impact - whether the job provides opportunities to have a positive impact on others, a negative impact on others or both. In recent years, organizational scholars have taken conceptual steps to develop and elaborate task significance research to consider how jobs and tasks are structured to provide opportunities to benefit others (Grant, 2007) and requirements to harm others (Molinsky & Margolis, 2005). By demonstrating that perceptions of prosocial and antisocial impacts are independently associated with employee well-being outcomes, our studies provide empirical support for the value of distinguishing between positive and negative valences of task significance. As such, our research has the potential to advance job design research towards a more comprehensive understanding of the ways in which employees perform jobs and tasks that affect others positively, negatively or both, and how these job characteristics affect the well-being of job incumbents.

## Limitations

An important limitation of our research is that cross-sectional data rendered causal inferences difficult. We have theorized that perceptions of impact affect job satisfaction and burnout, but we are unable to rule out alternative causal pathways. For example, unmeasured variables may affect both independent and dependent variables and inflate their interrelationships, and satisfaction and burnout may be causes, rather than consequences, of perceived impact. As a second example, it is possible that perceived antisocial impact moderates the association between perceived prosocial impact and well-being, rather than vice versa. According to this line of logic, perceived antisocial impact would undermine employees' perceptions of benefiting others, and thereby attenuate the well-being benefits of perceived prosocial impact. We strongly recommend that researchers conduct longitudinal and experimental studies to provide rigorous tests of these causal hypotheses. Furthermore, because the sample size was small in Experiment 2, we recommend additional tests of our hypotheses and attempts to replicate our findings with larger samples.

Because our surveys were limited to self-report variables, our results may be subject to common method and common source biases (see Podsakoff *et al.*, 2003, for a review). Although researchers have debated the significance of these biases, the general consensus is that they may reduce the validity of single-source, single-method results (e.g. Doty & Glick, 1998; Harrison, McLaughlin, & Coalter, 1996; Ostroff, Kinicki, & Clark, 2002). To mitigate these concerns, we utilized several of the procedures recommended by Podsakoff *et al.* (2003) to minimize common method biases. In both studies, we protected respondent anonymity. In Study 2, we counterbalanced question orders. In both studies, we used scale items that were clear, simple, specific and concise. Nevertheless, we recommend that researchers use marker-variable analysis to control

for common method biases (Lindell & Whitney, 2001), and triangulate self-report measures of job satisfaction and burnout with observer ratings and physiological measures of stress. Further, additional research is necessary to assess the validity of the measures that we developed for perceived prosocial impact, perceived antisocial impact and moral justification. It is not clear whether the items used adequately capture the domains of these constructs, nor whether including negatively keyed items along with positively keyed items will improve the measurement of perceptions of impact (e.g. Cordery & Sevastos, 1993). Finally, in the first study, the interaction between perceived prosocial and antisocial impacts explained only 1% additional variance in job satisfaction, calling into question the practical significance of the interaction. On the other hand, in the second study, the interaction explained 11% additional variance in burnout. Future research will be important in ascertaining the practical significance of perceived prosocial impact as a moderator of the association between perceived antisocial impact and well-being.

## **Future directions**

Our findings also highlight several promising directions for future research. First, in measuring perceptions of antisocial impact, we did not distinguish between different types and experiences of harm. In light of evidence that people judge accidental harm as less severe and morally objectionable than intentional harm (e.g. Darley & Pittman, 2003; Darley & Zanna, 1982; McGraw, 1987), prefer to cause indirect rather than direct harm (e.g. Milgram, 1974; Molinsky & Margolis, 2005; Royzman & Baron, 2002), and experience different levels of regret over time depending on whether it has occurred as a result of a committed act or an omitted act (e.g. Gilovich & Medvec, 1995), we strongly recommend that researchers investigate how different types and experiences of harm are differentially related to job satisfaction and burnout. Although we believe that the general psychological process of moral justification is likely to operate across occupations, the viability of this process for protecting employees against the noxious experience of harming others is likely to vary depending on the types of impact. For example, it is likely the case that employees are more capable of justifying harm when their actions contribute lasting benefits to others.

Second, we are not able to rule out alternative explanations for our findings, especially those pertaining to individual differences. For example, the bivariate associations between the perceived impact and well-being variables may be explained by dispositional differences in positive vs. negative affectivity, such that individuals high in positive affectivity are more likely to make favourable judgments of their impact and well-being, whereas individuals high in negative affectivity are more likely to make unfavourable judgments of their impact and well-being (e.g. Brotheridge & Grandey, 2002; Fortunato & Stone-Romero, 2001; Zellars, Perrewé, & Hochwarter, 1999). As a second example, the relationship between the interaction of perceptions of prosocial and antisocial impact and well-being may be shaped in part by individuals' moral beliefs and values. Specifically, employees who hold an economic view of morality may be more comfortable using tradeoff logic to justify harm by attending to benefits (e.g. Tetlock, Kristel, Elson, Green, & Lerner, 2000). Future research is necessary to examine the role

<sup>&</sup>lt;sup>2</sup> We thank two anonymous reviewers for this suggestion.

of individual differences in perceived impact, and how these differences affect the relationship between perceived impact and well-being.

Third, our studies provided only a limited test of the moral justification mechanism as a mediator of the relationship between perceived impact and well-being. We recommend further research to examine the role of cognitive dissonance and moral identities in shaping moral justifications and their implications for employee well-being. Furthermore, because we were only able to test the moral justification mechanism as a mediator of the associations between perceived impact and burnout, additional studies are necessary to examine whether this psychological process also mediates the associations between perceived impact and job satisfaction.

Finally, our studies are unable to address the conditions under which perceptions of prosocial vs. antisocial impact carry greater weight in employees' experiences. We encourage researchers to examine these conditions in future studies. Moreover, based on the promising findings about the role of perceived impact in job satisfaction and burnout, investigations of how organizations can promote perceptions of prosocial impact and prevent perceptions of antisocial impact will be of both theoretical and practical value (see Grant, in press; Molinsky & Margolis, 2005). It will be particularly important for researchers to examine whether the protective role of perceived prosocial impact is a double-edged sword, as it may enable employees to disengage morally from the larger ethical implications of doing harm (Bandura, 1999). We encourage researchers to examine whether the moral justification enabled by perceived prosocial impact has an ironic consequence: it may prevent employees from experiencing guilt about doing harm thereby discouraging them from engaging in further prosocial behaviour to redress the harm done. Furthermore, we hope to see further attention to whether organizations seek to manipulate employees by cultivating illusory perceptions of prosocial impact (Ashforth & Kreiner, 1999).

# Practical contributions

Our studies also offer valuable contributions to management practice. Specifically, our results highlight the importance of designing jobs to provide opportunities for prosocial impact (Grant et al., 2007) especially in occupations that also require employees to carry out acts that harm others (Molinsky & Margolis, 2005). Managers may enhance employee job satisfaction, and prevent burnout, by attending to employees' experiences of benefiting others through their actions at work. Further, in a study of a nationally representative sample of Americans, Colby, Sippola, and Phelps (2001: 483) found that 'Any job can be experienced as contributing to others' welfare or not'. This finding suggests that employees' perceptions of prosocial impact are surprisingly malleable. Accordingly, employees themselves may play a more proactive role in enhancing their own job satisfaction and protecting against burnout by crafting their jobs - cognitively and behaviourally changing their tasks and relationships (Wrzesniewski & Dutton, 2001) - to create more opportunities for prosocial impact. For example, employees may volunteer for tasks that provide such opportunities, or offer help to others, in order to enhance their own experiences of prosocial impact. Such steps are likely to be especially important in jobs that require frequent antisocial impact, particularly if perceptions of prosocial impact do promote job satisfaction and prevent burnout, as our causal inferences have assumed.

## Conclusion

Organizational scholars have suggested that the experience of benefiting others can protect service employees from the personally harmful experience of harming others, but have taken few steps to theoretically develop and empirically test this claim. Our studies suggest that in modern organizations, where norms of self-interest are increasingly prevalent (Ferraro, Pfeffer, & Sutton, 2005; Miller, 1999), the experience of benefiting others plays a protective role against the noxious association between the experience of harming others and job satisfaction and burnout. Our results therefore lend empirical support to the well-being benefits of advice recently offered by the Dalai Lama to contemporary workforces (Dalai Lama & Cutler, 2004: 173): 'If you can, serve others. If not, at least refrain from harming them.'

# Acknowledgements

We appreciate constructive feedback on previous drafts from action editor Samuel Aryee, four anonymous reviewers, Sabine Sonnentag, Kathleen Sutcliffe, Andy Molinsky, Ruth Blatt, Georges Potworowski, Andy Bush, Allison Grant and members of the Impact Lab. For assistance with data collection, we thank Grace Chen, Christy Flanagan, Molly Gannon, Melissa Kamin, Emily Kidston and David Lapedis. The first author is grateful to the National Science Foundation Graduate Research Fellowship, the American Psychological Association Early Research Award, and the Society for Industrial and Organizational Psychology Lee Hakel Scholarship for providing financial support for the preparation of this article.

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