

## EDITORIAL

# The Impact of Stress on the Individual, the Dyad and the Team

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Many studies have shown that high job demands have a negative impact on employee well-being (e.g. Quick & Tetrick, 2003), particularly on burnout. Less attention, however, has been paid to possible consequences of the work environment for those with whom employees frequently interact—their intimate partners. Recently, the number of studies in which dyadic relationships are an explicit focus has increased mainly due to the development of crossover research.

The central aim of this editorial is to offer a short overview of theory and research on *crossover*. I will present the theoretical background on crossover research, summarize and discuss studies on the crossover of stress and strain from employees to their partners at home, and address studies on the crossover of work-related well-being from supervisors to subordinates and from employees to their co-workers.

## The Crossover Process

Crossover has been traditionally defined as the process through which psychological stress or strain experienced by one individual affects the level of stress or strain of another individual in the same social environment (Bolger, DeLongis, Kessler, & Wethington, 1989; Westman & Etzion, 1995). Accordingly, crossover is a dyadic, inter-individual transmission of stress or strain.

Crossover research is based on the propositions of role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), which recognizes fluid boundaries between work and family life. However, the crossover model adds another level of analysis to previous approaches by introducing the inter-individual level, specifically the dyad, as an additional focus of study (Westman, 2001).

Westman and Vinokur (1998) and Westman (2001) specified three main mechanisms that can account for the apparent effects of a crossover process. These mechanisms include common stressors, empathetic reactions

and an indirect mediating interaction process. *Common stressors* affecting both partners will impact the strain of both partners, and the similarity in the strain will appear as crossover. Thus, Westman and Vinokur suggest that common stressors in a shared environment that increase both partners' strain should be considered as a spurious case of crossover. *Direct empathetic crossover* implies that stress and strain are transmitted from one partner to another as a direct result of empathetic reactions. The basis for this view is the finding that crossover effects appear between closely related partners who care for each other and share the greater part of their lives together. Accordingly, strain in one partner produces an empathetic reaction in the other that increases his or her strain. Finally, *indirect crossover* of strain is a transmission mediated by interpersonal exchange. Thus, an increase in the strain of one partner is likely to trigger provocative behaviour of, or exacerbate a negative interaction sequence with, the other partner, often expressed as social undermining and perceived as such by the partner at whom this behaviour is directed (Vinokur & Van Ryn, 1993). Thus, job and family stressors evoke a need for adaptation, which may lead to tension and ultimately to negative interactions in the family. These mechanisms have been tested and supported by findings of several studies (Howe, Levy, & Caplan, 2004; Song, Foo, Uy, & Sun, 2011; Westman & Vinokur, 1998).

## Crossover Research

Some researchers have focused on the crossover of job stressors from the individual to the spouse, others have examined the process whereby job stressors of the individual affect the *strain* of the spouse, and yet others have studied how psychological strain of one partner affects the strain of the other (see Bakker, Westman, & van Emmerik, 2009; Westman, 2001).

Most crossover studies have investigated and found evidence of crossover of psychological strains such as anxiety (Westman, Etzion, & Horovitz, 2004), burnout (e.g. Bakker & Schaufeli, 2000; Westman & Etzion, 1995), distress (Barnett, Raudenbush, Brennan, Pleck, & Marshall, 1995), depression (Howe et al., 2004),

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adjustment (Takeuchi, Yun, & Teslu, 2002), work–family conflict (WFC) (e.g. Hammer, Allen, & Grigsby, 1997; Westman & Etzion, 2005) and marital dissatisfaction (Westman, Vinokur, Hamilton, & Roziner, 2004). A small number of studies investigated crossover of health complaints and perceived health between partners (Gorgievski-Duijvesteijn, Giesen, & Bakker, 2000; Westman, Keinan, Roziner, & Benyamini, 2008). Some studies focused exclusively on unidirectional crossover from husbands to wives, whereas others looked for bi-directional crossover from husbands to wives and from wives to husbands.

## Crossover in the Workplace

Initially, crossover research focused on the work–family interface, examining the crossover of stress and strain between spouses and cohabiting partners (for overviews, see Bakker et al., 2009; Westman, 2001). Developing a crossover model, Westman (2001) suggested expanding the scope of crossover research within work settings by changing the traditional unit of analysis from the couple to individuals in a work team. As previous crossover research was based on the work–family interface, researchers have focused particularly on the family as the ‘victim’ of the job incumbent’s stress (e.g. Jackson & Maslach, 1982). However, if we base the crossover construct on role theory, we can broaden the scope of research and investigate the crossover of stress among role senders in the work environment. Moreover, in the latter case, we can extend the conceptualization of the unit of study from dyads to the work team.

This approach is consistent with Moos’ (1984) theory that people are part of social systems and must be understood within these systems. Each member in the system is linked to other members and change in one will presumably trigger change in others. Thus, a person’s stress generated in the workplace may affect others in the work team. Individuals in the work team who share the same environment may trigger a crossover chain of stressors and strain among themselves, whether the source of stress is in the family or at the workplace. The shared environment that is crucial to the crossover process characterizes workplaces where job incumbents work in close cooperation.

Based on these notions, Westman and Etzion (1999) conducted the first crossover field study in the workplace. They found a crossover of job-induced strain from school principals to teachers and vice versa. The next stage was to investigate affective linkages among team members. Bakker, Van Emmerik, and Euwema (2006) investigated the crossover of burnout among Dutch constabulary officers. They hypothesized that burnout can transfer from teams to individual team members. The results of multilevel analyses confirmed this crossover phenomenon by showing that team-level burnout was related to individual team members’ burnout (i.e. exhaustion, cynicism and reduced

professional efficacy) after controlling for individual members’ job demands and resources.

In another study among employees of a Dutch municipality working in 49 teams, Van Emmerik and Peeters (2009) investigated the crossover of team-level stressors to individual-level WFC. The results indicated that team-level WFC and family–work conflict (FWC) influenced individual-level WFC and FWC, respectively. Thus, the study demonstrated crossover of stressors to different types of work–family conflicts, indicating that what happens in teams influences individual employees.

Recently, Westman, Bakker, Roziner, and Sonnentag (in press) examined crossover of stress and exhaustion in 100 teams of employees of an employment agency, twice in one six-week period. Multilevel analysis using a longitudinal design did not reveal the main effect of crossover of stress or strain. However, results showed a moderating effect of team cohesion and social support on the crossover process. Although teams characterized by low levels of cohesion and social support showed no crossover of job stress and exhaustion, the researchers detected crossover of job stress and exhaustion from the group to individual team members in teams characterized by high levels of cohesion and social support.

Similarly, evidence for crossover of burnout was found among various team members such as nurses (Bakker, Le Blanc, & Schaufeli, 2005), general practitioners (Bakker, Schaufeli, Sixma, & Bosveld, 2001), teachers (Bakker & Schaufeli, 2000), constabulary officers (Bakker et al., 2006), soldiers (Bakker, Westman, & Schaufeli, 2007) and employees of an employment agency (Westman et al., in press).

## Future Directions for Crossover Research

I conclude with suggestions for future crossover research. Most of these suggestions have recently become the focus of research efforts, but more volume is necessary. The main directions for the crossover research are the study of crossover of positive experiences, crossover among team members, and a focus on experiments and longitudinal studies in search for additional mechanisms underlying the crossover process, and the exploration of traits related to crossover.

Westman (2001) maintains that if the crossover process operates via empathy, one would expect to find not only negative crossover but positive crossover as well. Thus, empathy could just as easily involve the sharing of another’s positive emotions and the conditions that bring them about. Just as stressful demands or strain from a bad day at work may have a negative impact on the partner’s well-being, the effects of positive events may also cross over to the partner and have a positive impact on his or her well-being and interactions with the spouse. Thus, positive events and

emotions may also cross over to partners and team members and have a positive impact on their well-being. Recently, several studies have confirmed positive crossover between spouses and team members. Therefore, I suggest that the original definition of crossover, which relates to transmission of stress and strain, should be extended to include the transmission of positive experiences and emotions. It seems important to also include crossover of positive emotions in crossover models and account for the potency of positive crossover compared with the crossover of negative emotions.

Some additional issues that have to be dealt with include the questions of what initiates the crossover process and what fuels it. Is it long term or short term? What are the processes that affect the crossover of burnout? More conceptual work is needed to tease out the varieties of crossover.

Another issue is crossover among team members. This phenomenon has very important implications for the individual and for the organization and should be studied thoroughly. Following the reviewed studies, one could claim that the crossover phenomenon does not necessarily start with one's stress that results in strain, but that being in constant contact with people who declare their burnout is contagious. The question remains as to whether the intensity and duration of contagious burnout is similar to burnout experienced by people who either empathize with a burnt out partner or develop burnout as a result of undermining behaviour from a burnt out partner.

If stress and strain in the workplace are contagious, this might lead to burnout or a depressive climate in organizations. The new trends in structuring work, including the increase in the use of team-based production and greater interdependency, will only increase the possibility and frequency of crossover, thus creating a 'burnout climate'. Researchers and managers should identify the processes leading to this phenomenon and suggest ways to prevent and manage it at the individual, dyad and team levels.

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