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The Crossover of Work Engagement between Working Couples:

A Closer Look at the Role of Empathy

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### Abstract

This study among 175 Dutch couples working in different occupational sectors tested the hypothesis that the crossover of work engagement is moderated by empathy. More specifically, we tested the hypothesis that women's work engagement would crossover to their men's engagement, particularly when men score high on empathic concern and perspective taking (the spontaneous tendency of a person to adopt the psychological perspective of other people). In addition, we predicted that work engagement would be positively related to colleague ratings of job performance. The results of moderated structural equation modeling analyses showed that the crossover of work engagement was strongest when men were high (vs. low) in perspective taking. Empathic concern did not moderate the crossover effect. In addition, work engagement was positively related to performance. These findings expand the crossover literature by shedding light on the crossover process.

*Keywords:* Crossover, Empathy, Job Performance, Work Engagement

## The Crossover of Work Engagement between Working Couples:

### A Closer Look at the Role of Empathy

The process that occurs when the psychological well-being experienced by one person affects the level of well-being of another person is referred to as crossover (Westman, 2001) or transmission (Jones & Fletcher, 1993; Rook, Dooley, & Catalano, 1991). Crossover is a dyadic, inter-individual transmission of well-being between closely related individuals that occurs within a particular domain such as the workplace or the family. Most studies conducted during the past decade have focused on *unwell-being*, and these studies have shown that several types of strain may crossover from one person to another (intimate partners, or colleagues), including anxiety (Westman, Etzion & Horovitz, 2003), depression (Katz, Beach & Joiner, 1999; Vinokur, Price & Caplan, 1996; Westman & Vinokur, 1998), and job burnout (Bakker, LeBlanc & Schaufeli, 2005; Bakker & Schaufeli, 2000; Bakker, Schaufeli, Sixma & Bosveld, 2001; Westman & Etzion, 1995, 1999).

Only a few studies have examined the crossover of *positive* well-being, including marital satisfaction (Demerouti, Bakker & Schaufeli, 2005), flow at work (Bakker, 2005), and work engagement – a positive, fulfilling, and work-related state of mind which is characterized by vigor, dedication and absorption (Bakker, Demerouti & Schaufeli, 2005; Bakker, Van Emmerik & Euwema, 2006). Although these studies made a strong case for the existence of positive crossover, they did not illuminate the mechanisms responsible for the crossover. The first aim of the present study is to examine the role *empathy* plays in the crossover of work engagement from working women to their partners. The second aim of this study is to examine whether men's engagement, in turn, has an impact on their job performance. Before we review the theoretical background of our crossover hypotheses, we will first briefly introduce the concept of work engagement.

### *Work Engagement*

Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá & Bakker, 2002). Vigor is characterized by high levels of energy and mental resilience while working. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, and challenge. Absorption is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work (see also, Schaufeli & Bakker, 2004). In short, engaged employees have high levels of energy and are enthusiastic about their work. Moreover, they are often fully immersed in their work so that time flies (see also May, Gilson & Harter, 2004).

Research has shown that engaged workers report good mental (Schaufeli, Taris & Van Rhenen, in press) and psychosomatic health (Demerouti, Bakker, De Jonge, Janssen & Schaufeli, 2001). Furthermore, they exhibit personal initiative, proactive behavior and learning motivation (Sonnetag, 2003; Schaufeli & Salanova, in press). This agrees with the results of qualitative research showing that engaged employees take initiative and generate their own positive feedback (Schaufeli, Taris, Le Blanc, Peeters, Bakker & De Jonge, 2001). Taken together, these findings suggest that engaged workers are *able* and *willing* to 'go the extra mile'. In addition, this is consistent with the notion that vigor and dedication are the core elements of work engagement (see also González-Romá, Schaufeli, Lloret & Bakker, 2005).

#### *The Crossover Process*

Westman (2001, 2006; Westman & Etzion, 1999) has argued that there are three main mechanisms responsible for crossover. Note that Westman has generally referred to the crossover of *unwell-being*, but there is no reason to believe that the mechanisms do not apply to positive states. The first mechanism concerns the direct transmission of stress and strain between partners. According to Westman, strain in one partner produces an *empathic reaction*

in the other that increases his or her level of strain. Eckenrode and Gore (1981) suggested already more than 25 years ago that the effect of one's strain on the spouse's distress might be the result of empathy as expressed in reports such as "We feel their pain is our own" (p. 771). However, to our knowledge, the empathy explanation has never been tested in empirical research.

The second mechanism suggests that the relationship between partners' strain is spurious, since what appears to be a crossover effect is the result of common stressors experienced by both partners. For instance, if both partners are working intensively, they do not have much time to spend on joint, relaxing leisure activities. In addition, partners usually share similar family circumstances (e.g., family resources and stressors). Consequently, their feelings of fatigue may be positively related.

Finally, Westman (2006) argues that crossover may be the result of an indirect interaction process. Specifically, she states that social support or undermining behaviors may mediate the crossover of one partner's strain to the other partner's strain. Indeed, it has been shown that social undermining (i.e., to express negative affect, convey negative evaluation or criticism, or hinder the attainment of instrumental goals) mediates the crossover of depression from one partner to the other (e.g., Westman & Vinokur, 1998).

#### *A Closer Look at the Crossover Process*

The present study focuses on *empathy* as the potential underlying mechanism causing direct crossover. Generally, it is assumed that the emotions expressed by one partner elicit an empathic reaction in the other partner. This agrees with the literal root meaning of the word empathy: "feeling into". Starcevic and Piontek (1997) define empathy as interpersonal communication that is predominantly emotional in nature and involves the ability to be affected by the other's affective state, as well as to be able to read in oneself what that affect

has been. Similarly, Lazarus (1991) defined empathy as “sharing another’s feelings by placing oneself psychologically in that person’s circumstances (p. 287).”

The core relational theme for empathy would involve the sharing of another person’s emotional state, distressed or otherwise. Accordingly, strain in one partner may produce an empathic reaction in the other, which – in its turn – increases the receiver’s strain. Or conversely, the work engagement expressed a female worker may fuel her partner’s engagement, because it focuses his thoughts on the positive aspects of work that make him enthusiastic. Social learning theorists (e.g., Bandura, 2001; Stotland, 1969) support this view, and have explained the transmission of emotions as a conscious processing of information. They suggest that individuals imagine how they would feel in the position of another and thus come to experience and share others’ feelings (see also Bakker, Schaufeli, Demerouti & Euwema, 2007).

At a theoretical level, empathy may best be considered as a set of related constructs including both emotional and non-emotional components (Davis, 1980, 1983; Deutsch & Madle, 1975). Based on such a multidimensional view of empathy, Davis developed the interpersonal reactivity index, which consists of four separate dimensions. Two of these are of special interest for the present study. One component is *perspective taking*, that is “the spontaneous tendency of a person to adopt the psychological perspective of other people – to entertain the point of view of others” (Davis, 1983, p. 169). This component clearly refers to the non-emotional or cognitive type of empathy. It should be noted that Davis does not refer to the valence of the cognitions in his definition of perspective taking. The second component of interest is *empathic concern*, which refers to “an individual’s tendency to experience feelings of warmth, compassion, and concern for others” (p. 169). Thus, in contrast to perspective taking, empathic concern is clearly an indicator of emotional responsivity.

The present study is the first to test Westman's (2001, 2006) hypothesis that empathy moderates the crossover of well-being. On the basis of the literature, we formulated the following two hypotheses:

*Hypothesis 1:* Empathic concern moderates the relationship between women's and men's work engagement. The crossover of engagement will be strongest when men are characterized by high (vs. low) levels of empathic concern.

*Hypothesis 2:* Perspective taking moderates the relationship between women's and men's work engagement. The crossover of engagement will be strongest when men are characterized by high (vs. low) levels of perspective taking.

### *Work Engagement and Performance*

The second aim of this study is to examine whether men's work engagement is related to their job performance. Evidence for such a relationship would show that engagement is rooted in objective work behavior. Most managers believe that there is a strong and positive link between employee well-being and job performance (Wright & Cropanzano, 2000). The general assumption is most probably that if individuals are happy, they are energetic and willing to invest effort in their work. Scientific research has indeed shown that subjective well-being coincides with many positive phenomena. For example, researchers have found that people who are happy and energetic are less likely to catch colds (Cohen, Doyle, Turner, Alper, & Skoner, 2003), and they do better in social relationships (Lyubomirsky, King, & Diener, 2005). Happy people are more sociable and other people like them more. They are also more helpful and altruistic.

In addition, happy people are better able to cope with difficult situations (Veenhoven, 1988), since they generally have more resources. According to Lyubomirsky et al. (2005) ‘the success of happy people rests on two main factors. First, because happy people experience frequent positive moods, they have a greater likelihood of working actively toward new goals while experiencing those moods. Second, happy people are in possession of past skills and resources, which they have built over time during previous pleasant moods’ (p. 804).

Recent studies have indeed indicated that work engagement is positively related to performance (for an overview, see Demerouti & Bakker, 2007). For example, Salanova, Agut and Peiró (2005) showed that levels of engagement were positively related to customer ratings of performance, through service climate. Also, in their survey study among employees from a wide range of occupations, Schaufeli, Taris and Bakker (2006) found that work engagement was positively related to in-role performance ( $\beta = .37$ ), whereas workaholism was not. Furthermore, in their diary study among teachers, Bakker and Bal (2006) showed with multi-level analysis that state levels of work engagement were fueled by job resources, and were predictive of in-role and extra-role performance. Finally, using a different conceptualization and measure of work engagement, Harter, Schmidt and Hayes (2002) demonstrated that employees’ levels of engagement were positively related with business-unit performance (e.g., customer loyalty, profit, and productivity). On the basis of this overview, we formulated the third and final hypothesis:

*Hypothesis 3:* Work engagement is positively related to (colleague ratings of) in-role and extra-role performance.

## Method

### *Procedure*

Participants were recruited by nine psychology students of a Dutch university. Each of the students was asked to approach 20 dual-earner couples as a requirement for their bachelor

thesis. Of the 180 packages with questionnaires distributed, 175 were returned completed, resulting in a response rate of 97%. The students left two questionnaires to each couple, as well as a separate one-page questionnaire for a colleague of the man. The questionnaires were code-numbered to match the data of the partners and the colleague. Despite this code numbering, the participants remained unidentified as all questionnaires were answered anonymously. The partners were kindly requested to fill in the questionnaires independently. In addition, the men were instructed to approach a colleague with whom they collaborated on a daily basis, with the request to fill in the short questionnaire regarding performance. Colleagues used closed envelopes to return the completed questionnaire to the participant. Each couple returned their own questionnaires and the colleague questionnaire to the researchers using pre-stamped envelopes. We decided to examine one-directional crossover effects and use the male participants as target persons. In The Netherlands, men more often occupy full-time jobs than women, and we reasoned that it would therefore be easier for colleagues to judge men's job performance. The female participants filled in questions regarding their work engagement, whereas men reported on their empathy and work engagement. Men's colleagues were invited to evaluate the job performance of the target participants.

### *Participants*

The participants in the study were 175 Dutch couples of dual-earner parents. Men were almost three years older than women,  $t(348) = 2.31, p < .05$  (Men  $M = 43.97, sd = 10.43$ , Women  $M = 41.31, sd = 10.93$ ). Most participants (69.1%) had children: 12.0% had one child, 33.7% had two children, and 23.4% had three children or more. There was no difference between the genders regarding educational level,  $t(348) = .73, p = .47$ . The most frequently mentioned level of education was college education (34.3%), followed by university (33.5%). However, women worked more often with people (84%) than did men (69.7%),  $\chi^2(1) =$

10.04,  $p < .002$ , while men worked more often with information (18.3%) than women (10.3%),  $\chi^2(1) = 4.57, p < .03$ . For example, more women (29.3%) than men (13.1%) worked in health care (as a physician, nurse, therapist), whereas more men worked in industry – as a production manager, constructor, engineer (Men: 8.6%, Women 2.3%) and in business – as an accountant, lawyer, salesperson (Men 22.3% vs. Women: 14.3%). On average, men had 21.03 (SD = 11.46) years of work experience, whereas women had 16.71 (sd = 10.41) years of work experience. Finally, as expected, more men (86.2%) than women (28.0%) worked full-time,  $\chi^2(1) = 108.44, p < .001$ . Thus, our sample included somewhat older, highly educated full-time working men and part-time working women with considerable job tenure.

### *Measures*

*Empathy* was assessed using two scales from the Interpersonal Reactivity Index (Davis, 1980). The *perspective taking* sub-scale includes seven items measuring the tendency to adopt the point of view of other people in everyday life. A sample item from this scale is “I sometimes try to understand my friends better by imagining how things look from their perspective”. The *empathic concern* scale (also seven items) measures the tendency to experience feelings of warmth, compassion, and concern for other people. A typical item from this scale is: “I often have tender, concerned feelings for people less fortunate than me”. For both scales, men could respond using a 5-point scale ranging from (1) “totally disagree” to (5) “totally agree”. Earlier studies have shown that the internal reliabilities of these scales range from .71 to .77, and test-retest reliabilities from .62 to .71 (Davis, 1980).

*Work Engagement* was assessed for both genders with the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003). Several studies have shown that the UWES has good psychometric properties (Schaufeli & Bakker, 2004; Schaufeli, Salanova, Gonzalez Roma & Bakker, 2002). The two central subscales of vigor and dedication were used in the present study (cf. González-Romá et al., 2005). *Vigor* was assessed with six-items, including

“At my job, I feel bursting with energy”. *Dedication* was measured with five items, such as “I am enthusiastic about my job”. The items of the engagement scales used a seven-point response format (0 = never, 6 = every day).

*Performance*. Two types of performance were assessed. *In-role* performance is defined as those officially required outcomes and behaviors that directly serve the goals of the organization (Motowidlo & Van Scotter, 1994). *Extra-role Performance* is defined as actions that go beyond what is stated in formal job descriptions and that increase organizational effectiveness (McKenzie, Podsakoff & Fetter, 1991). The two types of performance were each assessed with three items of the instrument developed by Goodman and Svyantek (1999). Here is an example of both scales: “Achieves the objectives of the job” (in-role), and “Willingly attends functions not required by the organization, but helps in its overall image” (extra-role). Colleagues of the men were asked to indicate the extent to which they found each statement characteristic of the men (0 = not at all characteristic, 6 = totally characteristic). We conducted additional analyses to examine the validity of both scales, using the data of Bakker, Demerouti and Verbeke (2004). In the latter study ( $N = 146$ ), the original scales of Goodman and Svyantek (1999) were used. Results showed that the shortened scales used in the present study correlated strongly with the original scales:  $r = .92$ ,  $p < .001$  for in-role performance, and  $r = .94$ ,  $p < .001$  for extra-role performance. This clearly shows that the scales are valid, and measure the intended constructs.

### *Statistical Analyses*

To test the three hypotheses, we conducted moderated structural equation modeling (MSEM) analyses, using the AMOS software package (Arbuckle, 2003). We preferred MSEM to hierarchical regression analyses, because MSEM allows assessing and correcting for measurement error, and it allows more than one dependent variable. Additionally, MSEM

provides measures of fit of the models under study. We followed the procedure proposed by Mathieu, Tannenbaum and Salas (1992), as described by Cortina, Chen and Dunlap (2001).

For each hypothesized interaction effect, we tested a model that included three exogenous (Men's empathy, Women's work engagement, the interaction between both variables), and two endogenous (Men's Work engagement, and Colleague ratings of Men's performance) factors. We tested two different models, one for empathic concern and one for perspective taking. The exogenous variables had only one indicator that was the standardized (centered) scale score of the respective factor (cf. Mathieu et al., 1998). The indicator of the latent interaction factor was the multiplication of the standardized scale scores of the empathy factor (in the first model empathic concern, and in the second model perspective taking), and women's work engagement. The two endogenous latent variables each used two indicators: men's vigor and dedication were the indicators of men's work engagement, and colleague ratings of men's in-role and extra-role performance were the indicators of the latent performance factor.

The models included direct paths from the three exogenous factors (men's empathy, women's work engagement, and their interaction) to men's work engagement (vigor and dedication). The empathy and women's engagement factors were allowed to correlate, whilst correlations between empathy/women's engagement and the interaction term were constrained to be zero. The paths from the latent exogenous factors (that formed the interaction term) to their indicators were fixed using the square roots of the scale reliabilities, whilst the error variances of each indicator were set equal to the product of their variances and one minus their reliabilities. See Figure 1 for our final model. For more details regarding the calculation of the reliability score of the interaction term, we refer to Cortina et al. (2001).

The fit of the models was assessed with the chi-square ( $\chi^2$ ) statistic, the Goodness of Fit Index (GFI) and the Root Mean Square Error of Approximation (RMSEA). It is suggested

that GFI values that exceed .90 and RMSEA values as high as .08 are indicative of good fit (Byrne, 2001). A significant interaction effect is evident when the path coefficient from the interaction factor to the endogenous factors is statistically significant. The final step for confirming the significance of an interaction is to test the model with and without the path from the latent interaction factor to the endogenous factors, and compare the two models on the basis of the  $\chi^2$ -difference statistic.

## Results

### *Descriptive Statistics*

Table 1 shows the means, standard deviations, correlations, and the internal consistencies of all scales included in this study. As can be seen, the reliabilities were moderate to acceptable for all scales. Furthermore, the composite, sum score of women and men's work engagement is significantly correlated ( $r = .22, p < .01$ ) providing a first indication of direct crossover. Men's work engagement and in particular their dedication is positively related to both in-role and extra-role performance.

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Insert Table 1 about here

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### *Results of MSEM Analyses*

Results of MSEM analyses provided *no* support for our first hypothesis that empathic concern would moderate the crossover effect. While the fit of the model to the data was satisfactory,  $\chi^2(13) = 26.52, p = .01, GFI = .96, TLI = .89, CFI = .93, RMSEA = .08$ , the latent interaction factor was not significantly related to men's work engagement ( $\gamma = .10, n.s.$ ). However, the model including perspective taking as a moderator showed a good fit to the data,  $\chi^2(13) = 21.19, p = .07, GFI = .97, TLI = .93, CFI = .96, RMSEA = .06$ ; and the latent interaction factor had a significant impact on men's work engagement ( $\gamma = .20, p < .05$ ).

Testing the model with and without the path from the latent interaction factor to men's work engagement showed that the elimination of the path significantly worsened the fit of the model,  $\Delta\chi^2(1) = 5.27, p < .05$ .

To examine the direction of the effect, a graphical representation of the interaction was derived from the simple slope analyses (Aiken & West, 2001; Frazier, Tix & Barron, 2004). We computed predicted values of men's work engagement for two groups, namely for those who score 1 standard deviation below and above the mean on the predictor (women's work engagement) and moderator (perspective taking) variables. After that, a figure representing the form of the interaction could be drawn. Consistent with Hypothesis 2, the crossover of engagement was stronger when men were characterized by high (vs. low) levels of perspective taking. When women's work engagement was high, men with high levels of perspective taking reported higher work engagement.

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### *Other Relationships*

Results of the MSEM analyses showed that women's work engagement had a positive main effect on their partner's work engagement ( $\gamma = .25, p < .01$ ). Whereas men's perspective taking was also significantly and positively related to their work engagement ( $\gamma = .29, p < .001$ ), men's empathy showed a nonsignificant positive effect ( $\gamma = .16$ ). Finally, and as predicted in Hypothesis 3, men's work engagement was positively related to their job performance (operationalized by colleague ratings of their in-role and extra-role performance;  $\beta = .38, p < .01$ ). Both models explained 14% of the variance in job performance.

### Discussion

The central aim of the present study was to take a closer look at the crossover process. We followed Westman's (2002) suggestion to add measures of empathy to crossover research in order to test the hypothesis that direct crossover is the result of an empathic reaction among closely related individuals – intimate partners. Since most studies to date have focused on the crossover of *negative* experiences (e.g., depression, burnout, anxiety) among couples, we decided to investigate the transmission of a *positive* experience – work engagement – from working women to their partners. We hypothesized that empathic concern and perspective taking reinforce and thus qualify the crossover effect. The results of moderated structural equation modeling analyses clearly showed that work engagement crosses over between partners. Furthermore, results supported the hypothesis that perspective taking moderates this crossover effect. Men who were inclined to adopt the point of view of other people in everyday life (perspective taking) were more strongly influenced by their partners' work engagement than their counterparts. For empathic concern we did not find such an effect.

These findings add to the literature in at least two ways. First, the finding that work engagement crosses over between partners replicates a previous study among working couples (Bakker et al., 2005). This strengthens our belief that positive experiences may cross over just as well as negative experiences, although positive experiences and feelings are not merely the absence of stress but qualitatively different experiences (Fredrickson, 2001). Second, the present study sheds some light on the *process* of crossover, and indicates under which conditions employees are influenced by their partners. Our findings offer partial support for the "direct-empathy" explanation for the crossover process (Westman, 2001, 2006).

Both empathic concern and perspective taking require imaginatively experiencing the situation of one's partner. Nevertheless, and interestingly, only perspective taking moderated the crossover of work engagement effect, and showed that work engagement was most likely when men were characterized by the spontaneous tendency to adopt the psychological

perspective of their partner. We can only speculate about the reasons why empathic concern did not act in a similar way. Whereas perspective taking clearly refers to the non-emotional or cognitive type of empathy, *empathic concern* is clearly an indicator of emotional responsiveness. It is conceivable that the latter type of empathy is more likely to moderate the crossover of *negative* (vs. positive) emotions. Empathic concern refers to a person's tendency to experience feelings of warmth, compassion, and concern for others, and this may be the active psychological mechanism when it comes to the crossover of strain. Nevertheless, we found that working women who communicated enthusiastically about their work influenced their partners' level of engagement, particularly when the men listened carefully and related emotionally to their wives.

Emotional and cognitive attunement greatly serves the goal of understanding the other's emotions, and is thus highly valuable in communication. In the current study, perspective taking had a main effect on work engagement as well, suggesting that this trait can be seen as a positive quality or *personal resource* (Hobfoll, 2002). However, it should be noted that perspective taking (just like empathic concern) may become a potential risk or vulnerability factor if the topic of the communication is negative. When having conflicts, or when one partner is burned-out, understanding may have deleterious effects. Indeed, marital adjustment research (e.g., Ickes & Simpson, 1997; Sillars, 1998) has shown that understanding may benefit couples as a general rule, but too much understanding regarding high-conflict issues or potentially threatening issues may be detrimental to the relationship. For example, Simpson, Oriña and Ickes (2003) videotaped married couples as they tried to resolve a problem in their marriage. Both spouses then viewed a videotape of the interaction, recorded the thoughts and feelings they had at specific time points, and tried to infer their partner's thoughts and feelings. Consistent with predictions, when the partner's thoughts and feelings were relationship-threatening, greater empathic accuracy on the part of the perceiver

was associated with pre-to-post-test declines in the perceiver's feelings of subjective closeness. The reverse was true when the partner's thoughts and feelings were nonthreatening. Future crossover studies should focus on the role of empathy in the transmission of negative work-related experiences, including burnout and work-related depressive symptoms.

Finally, consistent with the happy-productive worker thesis, we also found support for a positive relationship between men's work engagement and colleague ratings of their in-role and extra-role performance. This means that male employees who feel vigorous and strong, and are highly dedicated to their work perform better in terms of their role obligations and organizational citizenship behaviors. Whereas some studies in this domain have not found convincing evidence for the happy-productivity hypothesis, we found reasonable support for the link between work engagement and job performance. Previous research was generally characterized by small studies, and included positive affect, the absence of negative affect, job satisfaction, and (reduced levels of) exhaustion (Wright & Cropanzano, 1998). Our study suggests that it is the combination of 'can do' (vigor) and 'will do' (dedication) that is important. The results are in line with some recent studies showing that work engagement has positive effects on organizational performance (e.g., Salanova et al., 2005; Harter et al., 2004).

### *Limitations*

One limitation of the present study is that we only investigated the unidirectional effect of women's work engagement on men's engagement. In her review, Westman (2002) shows that although the evidence for bidirectional crossover is accumulating (e.g., Bakker et al., 2005; Demerouti et al., 2005; Hammer, Allen, & Grigsby, 1997), most (stress) crossover studies have been unidirectional, examining and finding effects of *husbands'* job stress on the well-being of their wives (e.g., Burke, Weir & DuWors, 1980; Jackson & Maslach, 1982; Long & Voges, 1987; Pavett, 1986; Rook et al., 1991). These studies related to the wives as

the passive recipients of stress and strain from their husbands, and in some cases had mixed samples of working and non-working wives.

We decided to examine the unidirectional effect of working women's engagement to their husbands' engagement since previous (stress) research has shown that crossover of stress and strain flows from husbands to wives more than from wives to husbands (Bolger, DeLongis, Kessler & Wethington, 1989; Jones & Fletcher, 1993; Westman, Etzion & Danon, 2001). Thus, our study can be seen as a conservative test of the crossover effect. The reason to use women as the senders of the information was that Dutch male employees work more often full-time, and therefore their performance is better visible for colleagues who are asked to rate their performance.

Another limitation of this study is that we focused on inter-gender relationships, and the generalizability of the results to same gender couples is unknown. In addition, our study was conducted among a heterogeneous sample of working couples in The Netherlands. We do not know how representative our sample is of the working population, which limits the external validity of our findings. Note however, that the response rate was very high, which is unusual for crossover research. Future studies should illuminate whether the present findings can be generalized to same gender couples and other national contexts.

### *Conclusion*

The present study clearly showed that work engagement crosses over between partners, and confirms the notion that – just like negative states - positive states do transfer between closely related individuals. Furthermore, perspective taking is one of the explanatory variables: men who were inclined to adopt the point of view of other people in everyday life were most likely to “catch” the vigor and dedication of their partners. Future studies should investigate whether empathic concern plays a similar role as a moderator when it comes to

negative states (e.g. burnout). Finally, our study adds to the literature on work engagement, by showing that this positive state of well-being is predictive of other-ratings of performance.

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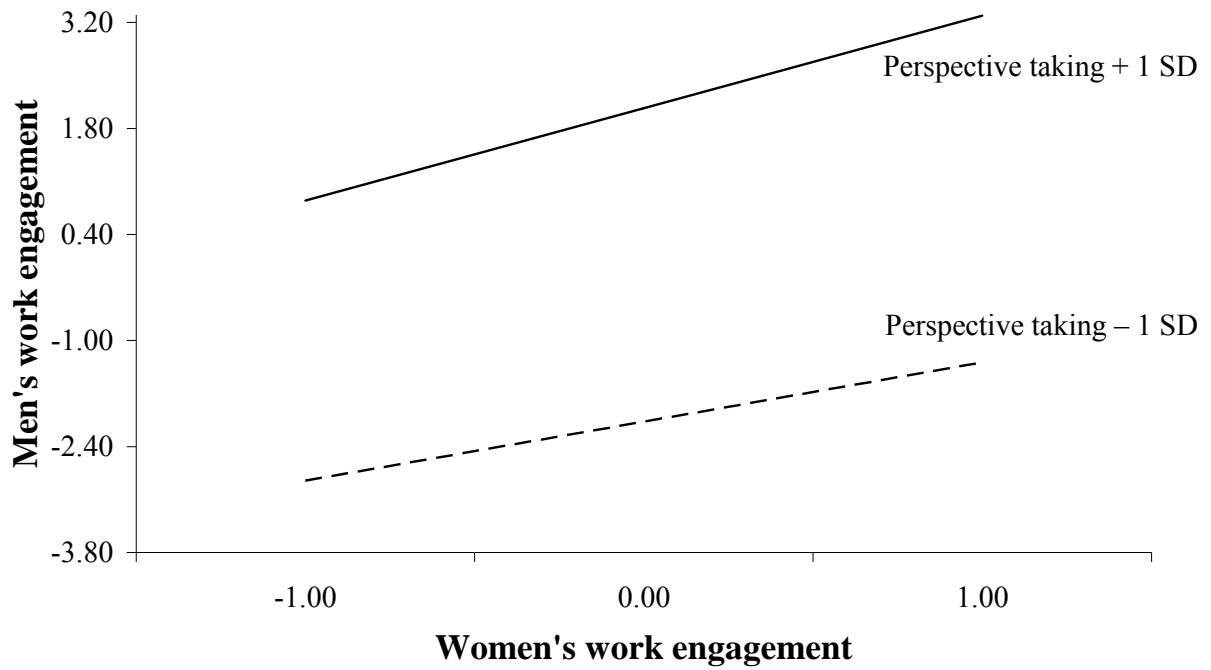
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Table 1

*Means, Standard Deviations (SD), Correlations and Reliabilities (Cronbach's alpha; on the Diagonal) of the Study Variables.*

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Work engagement W	4.19	.65	.87									
2. Vigor W	3.44	.76	.90**	.70								
3. Dedication W	4.18	1.10	.92**	.75**	.89							
4. Work engagement M	4.26	.68	.22**	.16*	.26**	.92						
5. Vigor M	3.51	.81	.20**	.13*	.25**	.92**	.84					
6. Dedication M	4.26	1.18	.22**	.17*	.25**	.93**	.73**	.91				
7. Empathic Concern M	3.58	.37	.12*	.09	.10	.14*	.14*	.14*	.69			
8. Perspective taking M	3.40	.33	.03	.04	.01	.23**	.20**	.25**	.33**	.62		
9. In-role performance M	4.78	.78	.00	.06	-.06	.19*	.11	.22**	.01	.16*	.87	
10. Extra-role performance M	4.33	.97	.01	.01	-.01	.22**	.21**	.21**	.22**	.30**	.36**	.72

*Note.* W = Women, M = Men; \*\*  $p < .01$ , \*  $p < .05$ .



*Figure 1.* Interaction effect of women's work engagement and men's perspective taking on men's work engagement.