There is Nothing Either Good or Bad but Thinking Makes it so:  
Social Influence and Cognitive Appraisal  
of the Work–Family Interface*  

It is typically assumed that juggling work and family responsibilities is difficult and stressful. However, according to the Transactional Model of Stress (Lazarus & Folkman, 1984), no situation or event is stressful in and of itself — it is how we cognitively construe a particular situation that matters. In the words of Epictetus (50 A.D. – 135 A. D.): “Men are disturbed not by things, but by the view which they take of them” (Ellis, 1962 p.54); or as Shakespeare put it “There is nothing either good or bad but thinking makes it so” (Hamlet, 2.ii). Consistent with this idea, studies into the formation of cognitive appraisals reveal that the appraisals individuals make - and thus the levels of stress they experience - can be influenced by information they receive from others (Haslam, 2004; Lazarus & Folkman, 1984; Tomaka, Blascovich, Kibler, & Ernst, 1997).

In the present research, we apply these insights to study the way in which individuals appraise and experience the task of combining their work and family lives. We present a field experiment in which we examined whether employees’ cognitive appraisals regarding their situation of work–family role combination are fixed, or in fact can be changed by information provided by others. Below, we first discuss two different theoretical views on role combination that have been central in the work-family literature. We then draw upon the transactional model of stress to study cognitive appraisals in regard to the work-family interface and present the prediction that information provided by others can affect the way people appraise and experience role-combing.

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5.1 Scarcity Theory and Work-Family Conflict

Research on the work-family interface has predominantly focused on the negative aspects of participating in both work and family roles. The scarcity theory on human energy has been central to this work, which assumes that personal resources of time, energy, and attention are finite. As a result, devoting attention to one role necessarily implies that fewer resources can be invested in another role (Greenhaus & Beutell, 1985; Marks, 1977). Accordingly, the fundamental assumption in this theory is that participation in one role tends to have a negative effect on other roles. Guided by this perspective, researchers have focused on experiences of work-family conflict, defined as: “A type of role conflict that arises when joint role pressures from work and family domains are experienced as incompatible in some respect, as a result of which participation in one role is made more difficult by virtue of participation in the other role” (Greenhaus & Beutell, 1985, p. 77; Greenhaus & Powell, 2003). As such, the work role can make it more difficult to fulfill family roles and vice versa (WF and FW conflict, Frone, Russell, & Cooper, 1992).

5.2 Role Expansion Theory and Work-Family Facilitation.

As opposed to the scarcity theory, Marks (1977) argued that role combination should be viewed from a different perspective. In his role expansion theory he considers human energy to be abundant and expandable and posits that participation in one role can also have positive effects on other role performances. This positive perspective has recently begun to receive substantial attention in the empirical literature. Within this perspective, scholars have examined the construct of work-family facilitation, capturing the individual’s experience that participation in one role makes it easier to fulfill the requirements of another role (van Steenbergen et al., 2007; Wayne et al., 2004). Facilitation is also bi-directional in nature in that work can facilitate the fulfillment of family roles and vice-versa (van Steenbergen et al., 2007).

In this way, scarcity and expansion theories represent two different ways of viewing the work-family interface: Either as a “fixed pie” where involvement in one role can only negatively affect another role, or as an “expanding pie” which implies that the fulfillment of one role can positively affect other role performances. Yet, counter to the idea that the theoretical choice here is of an ‘either/or’ nature, empirical studies show that individuals who combine work
and family can experience both conflict and facilitation, since conflict and facilitation represent separate constructs rather than being opposite ends of a single continuum (e.g., Frone, 2003; Grzywacz & Marks, 2000; van Steenbergen et al., 2007).

5.3 The Transactional Model of Stress and Cognitive Appraisals of the Work-Family Interface

The experience of stress is the response of an individual to demands in the environment. However, the nature of these environmental demands in itself is not decisive for the experience of stress. Instead, the same stressor can elicit different stress reactions in two different people. The transactional model of stress explains individual differences in the perceived stressfulness of encounters by conceptualizing the occurrence of stress as something that is psychologically mediated. According to this model, stress is then conceptualized as the strain imposed on a person by stressors in the environment which are appraised by that person to be in some way threatening to his or her well-being (Lazarus & Folkman, 1984; see also Cooper, Dewe & O’Driscoll, 2001; Haslam, 2004).

The transactional model of stress focuses on the role that cognitive appraisal plays in the experience of stress. According to Lazarus and Folkman (1984) cognitive appraisal is the process of classifying an event or situation, and its various facets, in terms of its significance for well-being. These researchers differentiate between two components of appraisal. In primary appraisal the individual assesses the degree to which a particular event or situation poses a threat to the self. Basically, this concerns the question: “Is this stressful?” If something is categorized as stressful these appraisals can be characterized as “harm-loss”, “threat” or “challenge”. Whereas harm-loss appraisals refer the assessment that injury has already taken place in the past (e.g., harm to a friendship, health), threat and challenge appraisals refer to ongoing or upcoming situations. A threat appraisal refers to the potential for harm or loss, whereas a challenge appraisal refers to the potential for growth, mastery or gain. When comparing threat and challenge appraisals, a threat appraisal relates to increased levels of negative affect whereas a challenge appraisal is associated with low levels of negative affect or higher levels of positive affect (Tomaka et al., 1997; Tomaka, Blascovich, Kelsey, & Leiten, 1993). In secondary appraisal the individual evaluates the available resources through which he or she can deal with the situation. The basic question here is: “Can I cope?” (Folkman & Lazarus, 1984). As such, the impact of a certain stressor in the environment on the individual
depends on the way that it is *construed* by the individual who is exposed to it (Haslam, O’Brien, Jetten, Vormdal & Penna, 2005).

Importantly, primary and secondary appraisal are dynamic processes in that over time an individual can come to redefine a particular situation through re-evaluation of situational demands or coping resources in the light of new information or new experiences in the situation. Moreover, the two components of appraisal are interdependent in that a negative secondary appraisal ("I cannot cope") negatively affects one’s primary appraisal ("This is stressful"; Haslam, 2004; Folkman & Lazarus, 1985, Tomaka et al., 1993). The two components of primary and secondary appraisal thus combine to determine whether an event or situation is regarded as significant for well-being, as if so, whether it is primarily seen as *threatening* (involving possibility for harm or loss) or as *challenging* (involving possibility of mastery or benefit; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). This difference between cognitively appraising a situation as *threatening* or *challenging* is also important in terms of behavioral consequences. That is, when facing an upcoming performance situation (e.g., a mental arithmetic task, Tomaka et al., 1993; athletic performance, Blascovich, Seery, Mugridge, Norris, & Weisbuch, 2004), individuals who appraise the situation as challenging have been found to put greater effort in the task at hand and actually to outperform those who appraise the situation as threatening.

In the case of fulfilling work and family roles, too, two individuals in similar work and family roles can fundamentally differ in how they experience combining these roles. As noted by Voydanoff (2004), the concept of cognitive appraisal is also relevant for work-family research that examines people’s experiences of conflict and facilitation. Here the experience of conflict derives from the individual’s appraisal that demands of the environment are taxing or exceeding one’s coping resources, whereas the experience of facilitation derives from appraising one’s resources as exceeding the demands of the environment (Voydanoff, 2004).

When individuals appraise their own situation of juggling work and family demands, we posit that the two components of primary and secondary appraisal come into play, such that the individual attempts to answer the questions of the form: “Is this combination of roles stressful?” and “Can I cope with this combination of roles?” Again, primary and secondary appraisal together determine whether the situation of role-combining is primarily seen as *threatening* (containing the possibility for harm or loss) or primarily perceived as *challenging* (holding the possibility of mastery or benefit; Folkman et al., 1986). When appraising the situation primarily as a threat, the individual is likely to
experience conflict. However, when the individual appraises role-combination primarily as a challenge, (anticipated) mastery of role-combination is more likely to occur and he or she is more likely to experience the beneficial effects that work and family roles can have for each other as evidenced by the experience of facilitation.

Although previous research has traditionally assessed conflict and facilitation as aspects of the individual’s subjective experience (i.e. via self-reports\(^n\)), we are unaware of research that applies current insights from the transactional model of stress to the formation of cognitive appraisals in work–family research. In the present study, our main purpose is to examine whether it is possible to influence the way that individuals appraise and experience combining their work and family roles. To the extent that such influence is possible, this would provide important new insights for designing intervention programs that aim to reduce employees’ experiences of conflict and enhance the experience of facilitation. This in turn would be expected to have positive consequences for employee’s health, together with their well-being and performance at work and at home (van Steenbergen et al., 2007).

5.4 Can Cognitive Appraisals be Influenced?

In the stress literature, several studies have shown that it is possible to exert influence on the formation of cognitive appraisals. In these studies, individuals have been provided with credible information by others that have subsequently influenced their own appraisal of a situation. Indeed, along these lines, informational support (also called appraisal support) is thought to provide individuals with the opportunity to increase their understanding of the situation, compare their appraisals with others, and assess the appropriateness of their emotional reactions (Aspinwall & Taylor, 1997; Cohen & Wills, 1985; Haslam et al., 2005).

A classic demonstration of the effects of appraisal support was provided by Lazarus in a study that involved participants watching a film about accidents in a wood-working shop (Lazarus, 1966; Lazarus & Folkman, 1984). Before seeing the film, those in the experimental conditions received information about the material they were about to watch — namely that people in the film were actors and that the accidents were simulated (e.g., because the video was for training

\(^n\) One exception in the literature is the study by Greenhaus, Collins, and Shaw (2003) where time-balance is assessed by comparing the objective amount of hours one spends per week on work versus family roles.
purposes). These conditions were designed to encourage participants to develop appraisals that prevented them from experiencing stress. Participants in the control condition received no such information. Consistent with the study’s hypothesis, participants in the experimental conditions reported and showed fewer physiological signs of stress than those in the control condition. Additionally, Holmes and Houston (1974) demonstrated that appraisal manipulations that were provided during the experience of electric shocks reduced participant’s stress reactions. More specifically, participants who were encouraged to appraise shocks as an interesting new physiological experience, or who were encouraged to remain uninvolved and detached, reported less anxiety and showed less physiological stress reactions during shock sequences than did participants who were not encouraged in this way. Further empirical evidence of such effects was provided by a study in which participants performed a mental arithmetic task after receiving one of two instructional sets. The “threat set” emphasized accuracy of task performance and potential evaluation whereas the “challenge set” emphasized effort and doing one’s best (Tomaka et al., 1997). As predicted, participants’ threat and challenge appraisals as well as their physiological responses differed depending on the instructional set. This indicates that the way one is encouraged to cognitively appraise a situation can determine situational meaning (Tomaka et al., 1997). In this way, these studies demonstrated not only the importance of cognitive appraisal processes to the experience of stress but also that these can be manipulated by providing information that bears upon people’s interpretation of the situation (Haslam, 2004).

To our knowledge, no previous study within the work-family literature has examined the possibility that cognitive appraisals regarding role-combining can be changed. However, Grzywacz and Bass (2003) do identify this possibility when recommending that work-family intervention programs should help employees better understand the personal benefits they and their families might receive from combining work and family. In their view, awareness of these benefits and gains might become a cognitive resource that can be drawn upon during difficult episodes.

Grzywacz and Bass (2003) thus alert practitioners to the interesting possibility that individuals can be helped to view role combination in a different, more positive light. The main purpose of the present field experiment is to see how realistic this possibility is by examining whether it is indeed possible to exert influence on the cognitive appraisals that employees make regarding the combination of work and family roles. To do this, the study involved providing
participants with credible information that made salient either a scarcity perspective or an expansion perspective on role combination. In line with the above theorizing, it was expected that this would influence the way in which employees cognitively appraised and experienced the process of combining their work and family roles and the degree to which they experienced positive or negative emotions when thinking about role combination. In addition, the study invited participants to report their thoughts about combining work and family roles (free thought listing), as we expected that, compared to reading the scarcity message, the expansion message would initiate a more positive train of thought regarding role combination.

Accordingly, it was predicted that, compared to participants who receive a scarcity message, those who receive an expansion message would (a) appraise role combination as less stressful, less threatening and more challenging, (b) report less conflict and more facilitation, (c) report less negative emotions and more positive emotions associated with role combination, and (d) spontaneously report more positive thoughts about role combination (Hypothesis 1).

5.5 The Role of Group Membership in Cognitive Appraisals

In addition to an examination of the effects of manipulating information content, the study also explored the role that the source of the appraisal information plays in the appraisal process. In this regard, previous work informed by social identity and self-categorization theory suggests that appraisal processes are structured by people’s internalized group memberships (Haslam et al., 2005; Levine & Reicher, 1996; see also McGarty, Haslam, Hutchinson & Turner, 1994). Specifically, following Turner (1991), because members of an ingroup are categorized as part of the (collective) self, they are predicted to be seen as a more valid source of normative information than members of an outgroup (Turner, Oakes, Haslam, & McGarty, 1994). Applied to the analysis of stress, this implies that a person’s appraisal of stressors should be affected most by those who are seen as members of one’s own group (Haslam & Reicher, 2006). For example, norms that develop within one’s working group concerning the interpretation of particular events and situations as stressful can have an important influence on the stress that is experienced by the individual employee, whereas the views of other work teams may have less of an impact because these are seen as less self-relevant (Haslam, 2004).

In an experimental study on the role of source identity in the appraisal process, students were given informational support that encouraged them to
construe a mathematical task as either challenging or threatening and stressful (Haslam, Jetten, O’Brien & Jacobs, 2004). The experiment was designed in such a way that participants thought the information was provided by someone they were likely to identify with (i.e., another University student) or not (a stress disorder sufferer). Consistent with predictions, when participants performed the mathematical task the informational support they received only impacted on experienced stress levels when the information came from another University student.

Along similar lines, the present research aims to also explore the role of source identity in cognitive appraisals of role combination. To do this, the study systematically varies the source of information about role combination. In one set of conditions, this information was said to originate from a self-relevant source — employees within the participants’ own organization. In a second set, it was said to originate from a less self-relevant source — employees within a healthcare organization. The study as a whole then examines whether the impact of message content (i.e., expansion vs. scarcity) is moderated by the source from which it emerges.

5.6 Method

Design and Procedure
A world-wide operating financial service organization in the Netherlands gave us permission to conduct a field experiment among their employees. We conducted our research among female employees with a youngest child younger than six years of age. We decided to select this relatively homogenous group of employees for our field experiment to keep constant as many factors as possible. The organization provided the e-mail addresses of a sample of 428 female employees with a youngest child aged younger than six, which was randomly drawn from the total sample of female employees in the organization with a youngest child in this age category. We invited these women to take part in our online survey via e-mail. Participants could win one of three coupons worth 50 Euros (US $ 62.7) when returning the completed survey.

Participants were randomly assigned to one of the four conditions arranged in a 2 (message: scarcity/expansion) X 2 (source: own organization/other organization) between-subjects design. Prior to completing the survey, participants were instructed to read one of two articles about combining work and family life. These articles supposedly described scientific research findings concerning people’s experiences of combining work and family roles. The scarcity
message explained that people possess only a limited amount of energy and that, as a result, devoting energy to work implies that less energy can be invested at home and vice versa. Moreover, this article indicated that negative aspects and experiences appear to predominate when people combine work and family roles and it outlined some of these negative aspects. In contrast, the expansion message explained that people possess an abundance of energy and that participation in one role, such as the work role, can provide a person with energy for the use in home-life roles and vice versa. It indicated that positive aspects and experiences appear to dominate when people combine work and family roles and provided examples of some of these. Different versions of these articles also informed participants that the scientific research findings either originated from colleagues within their own organization, or from healthcare employees (i.e., other organization).

After completing the survey, the participants were fully debriefed. They were informed about the true nature of the study and were told that the views about role combination were one-sided, as people’s actual experiences of combining work and family can be both positive (facilitating) and negative (conflicting) in content. Participants were also informed that the alleged research findings they had read were not based on any real or existing situation within their organization or elsewhere. Participants were requested not to discuss the study’s procedure with colleagues until the closing date for participation.

Measures

First, a manipulation check for message content asked the participants: “The research findings I just read showed that combining work and home life roles is generally experienced to be…..”; Responses were made on a seven-point scale (1 = mainly negative, 7 = mainly positive). The manipulation check for source read: “The described research was conducted within...” (1 = my organization, 2 = another organization).

Cognitive appraisals were measured with two items developed by Tomaka et al. (1997) which were adapted to specifically refer to role combination: “How stressful do you find combining your work and home life” (primary appraisal; 1 = not stressful at all, 7 = very stressful) and “How able are you to cope with combining your work and home life?” (secondary appraisal; 1 = not at all, 7 = very well). Following Tomaka et al. (1997), we calculated the ratio of primary to secondary appraisal, which reflects the extent to which demands are appraised as taxing or exceeding one’s resources or ability to cope. A ratio greater than 1.00 indicates that demands exceed coping resources, whereas a ratio smaller than
1.00 indicates that resources exceed demands. Because the Tomaka et al. (1997) measure only comprises two items, we also added the measures developed by Kessler (1998). To tap primary appraisal five items assessed the degree to which participants appraised role-combining as a threat (e.g., “The combining of my work and home life is frightening to me”, α = .87) and six items assessed the degree to which participants appraised role-combining as a challenge (e.g., “The combining of work and home life enables me to learn more about myself”, α = .84). Following Kessler (1998), secondary appraisal was assessed with five items, e.g., “I can make changes in the way that I combine my work and home life” (α = .75). Participants answered on seven-point scales (1= fully disagree, 7= fully agree).

**Work-family conflict and facilitation.** Following Carlson, Kacmar, and Williams (2000) and Carlson and Frone (2003), we examined different types of conflict that people can experience: Strain-based, time-based, behavioral, and psychological WF and FW conflict. Sample items are as follows: “Due to all the pressures at work, sometimes when I get home I am too stressed to do the things I enjoy (strain-based WF conflict, α = .86)”; “Tension and anxiety from my home life often weakens my ability to do my job” (strain-based FW conflict, α = .91); “I have to miss activities at home due to the amount of time I must spend on work” (time-based WF conflict, α = .71); “The time I spend on responsibilities at home often interferes with my work responsibilities” (time-based FW conflict, α = .71); “The problem-solving behaviors I use in my job are not effective in resolving problems at home” (behavioral WF conflict, α = .85); “Behavior that is effective and necessary for me at home would be counterproductive at work” (behavioral FW conflict, α = .87); “When I am at home, I often think about work-related problems” (psychological WF conflict, α = .86); “When I am at work, I often think about things I need to accomplish at home” (psychological FW conflict, α = .90; Carlson & Frone, 2003).

We used the three-item scales developed by van Steenbergen and co-authors (2007) to measure energy-based, time-based, behavioral, and psychological WF and FW facilitation. Sample items are: “When I get home from work I often feel emotionally recharged, enabling me to make a better contribution at home” (energy-based WF facilitation, α = .86); “Because I relax and regain my energy at home, I can better focus on performing my work” (energy-based FW facilitation, α = .87); “The amount of time I spend on my work stimulates me to undertake enjoyable activities in the time I spend on my home life” (time-based WF facilitation, α = .79); “The amount of time I spend on my home life stimulates me to use my time at work effectively” (time-based FW facilitation, α = .74); “The skills
Cognitive appraisals of the work-family interface

I use at work help me to better handle matters at home” (behavioral WF facilitation, \( \alpha = .83 \)); “Because of the things I learn at home I also function better in social contacts at work” (behavioral WF facilitation, \( \alpha = .85 \)); “Because of my work, I am better able to put home-related matters into perspective” (psychological WF facilitation, \( \alpha = .86 \)); “Because of my home life, I am more able to put work-related matters into perspective” (psychological WF facilitation, \( \alpha = .83 \)). Participants answered on 7-point scales (1= fully disagree, 7= fully agree).

Emotions. We asked participants to indicate their emotional state when thinking about combining their work and home life with six emotions. We examined three negative emotions (“desperate”, “angry”, and “depressed”; \( \alpha = .83 \)) and three positive emotions (“motivated”, “calm”, and “satisfied”; \( \alpha = .72 \)). For each emotion we used the following question format: “When I think about combining my work and home life, I feel ……” (1= not at all [emotion], 7= very [emotion]).

Spontaneous thoughts about combining work and family. We asked participants to report their thoughts about combining their work and home life using the following open-ended question (free listing): “We would now like to ask you to write down your own thoughts about combining your work and home life. These can be anything. There are no right or wrong answers”.

Demographic variables. The following background variables were also assessed: Working hours (contractual hours per week), age (1 = “29 years or less”; 2 = “between 30 and 39”; 3 = “between 40 and 49”; and 4 = “50 years or older”), education (1 = lower vocational education or high school; 2 = university or higher vocational education), organizational tenure (in years), salary category (1 = lowest; 15 = highest), marital status (1 = single; 2 = married / cohabiting), number of children, and age of youngest child (in years).

Participants
The response rate was 35.1% (\( N = 150 \)). We excluded six participants who incorrectly answered the manipulation check for source. We also had to leave out one participant because she did not meet the criteria for inclusion because she indicated having no children, leaving 143 participants in the final sample. These were distributed equally across the experimental conditions (\( Ns = 37, 33, 37, 36 \)).

Participants in this sample (all females) were contracted to work for an average of 31.1 hours per week (range 18-40, \( SD = 5.30 \)) and had an average

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\( ^c \) Inclusion of these participants did not affect the pattern of results reported here.
organizational tenure of 7.9 years (range 1-27, $SD = 4.18$). The organization’s salary system consists of 14 ascending salary categories, ranging from $2 = €1,200 per month to $15 = €9,900 per month (US $1,504 - 12,415). The average salary category for participants was in the middle of this range: 8.7 (approximately €3,050, US $3,825). Of the participants, 14% indicated being in the age category “29 years or less”, 79.7% were “between 30 and 39”, and 6.3% were “between 40 and 49”. About two-thirds of the participants (62.9%) had received higher education (university or higher vocational education), 37.1% had received lower education (lower vocational education or high school). Most of the women (96.5%) were married or cohabiting, the rest were single. In line with our sampling procedure, all participants had a child aged less than six years old. On average, these women had 1.5 children (range 1-3, $SD = 0.60$).

We compared our sample with statistics from the employee database on these control variables for all female employees with a youngest child 6 years of age or younger. This analysis revealed no significant differences (all $\chi^2$ tests and $t$ tests, $p < .01$), indicating that our sample was representative of this group of female employees within the organization as a whole. We also checked whether there were differences between the four conditions prior to our study, by conducting ANOVAs and $\chi^2$ tests for the control variables. No significant differences were found. This indicates that random sampling was successful and that any differences between participants in the experimental conditions cannot be explained by differences in background characteristics.

5.7 Results

Manipulation checks
As mentioned earlier, we excluded six participants who incorrectly answered the manipulation check for source. The manipulation for message content was successful. Participants who received the expansion message indicated that the article had shown that combining work and home life roles is experienced more positively ($M = 6.27$, $SD = 0.88$) than did participants who received the scarcity message ($M = 2.26$, $SD = 1.16$), $t(141) = 23.26$, $p < .001$.

Our main predictions were that, compared to participants who received the scarcity message, participants who received the expansion message would (a) appraise their own situation of role combination as less stressful, less threatening and more challenging, (b) would report less conflict and more facilitation, (c) would report less negative emotions and more positive emotions associated with role-combining, and (d) would spontaneously report more positive thoughts
about role-combining. We also examined whether the impact of the information differed depending on the source that provided the information (employees from own organization vs. other organization). To test these predictions, 2 (message content) X 2 (message source) analyses of variance were conducted for all dependent variables. None of the analyses revealed significant source or interaction effects. However, consistent with the main predictions, there were consistently reliable main effects for message content.

Cognitive appraisals

Consistent with predictions, participants in the expansion condition made a more positive primary appraisal than participants in the scarcity condition. That is, they appraised the combination of work and home life roles as less stressful (M = 3.47, SD = 1.34) than those in the scarcity condition (M = 4.33, SD = 1.48), F(1,139) = 12.84, p < .001, η² = .09 (primary appraisal; Tomaka). Participants in the expansion condition also appraised role combination more as a challenge (M = 5.69, SD = 0.90) than participants in the scarcity condition (M = 5.12, SD = 0.93), F(1,139) = 13.58, p < .001, η² = .09 and less of a threat (F(1,139) = 14.16, p < .001, η² = .09, M = 2.50, SD = 1.26 vs. M = 3.33, SD = 1.36, primary appraisal; Kessler). Furthermore, when asked about their ability to cope with combining their work and home life roles — secondary appraisal — participants in the expansion condition scored higher (M = 5.66, SD = 0.98) than those in the scarcity condition (M = 4.96, SD = 1.30), F(1,139) = 12.87, p < .001, η² = .09, secondary appraisal; after Tomaka). The same effect was also observed on the secondary appraisal measure developed by Kessler (F(1,139) = 4.17, p < .05, η² = .03, M = 5.24, SD = 1.05 vs. M = 4.85, SD = 1.17, secondary appraisal; after Kessler).

Finally, we examined the ratio measure of primary to secondary appraisal, reflecting the extent to which demands were appraised as exceeding resources or ability to cope (ratio primary/secondary appraisal; Tomaka et al., 1997; Tomaka et al., 1993). Mean scores on this ratio measure revealed smaller ratios for participants in the expansion condition (F(1,139) = 13.36, p < .001, η² = .09). Indeed, participants' mean score in the expansion condition was below 1.00 (M = .67, SD = .42), indicating that these participants appraised their coping resources as exceeding the demands of role-combining. On the other hand, participant's mean score in the scarcity condition was somewhat higher than 1.00 (M = 1.04, SD = .72), indicating that these participants appraised the demands of role-combining to exceed their resources to meet these demands. In summary, we found consistent support for our hypothesis that participants in the expansion
condition appraise role-combining more positively than participants who received the scarcity message.

Work-Family Conflict and Facilitation
Also consistent with the study’s main hypothesis, a MANOVA on the facilitation scales showed that, overall, participants in the expansion condition reported experiencing higher levels of facilitation ($F(8, 132) = 2.02, p < .05, \eta^2 = .11$) than those in the scarcity condition. More specifically, those in the expansion condition reported more time-based WF facilitation ($F(1) = 5.55, p < .05, \eta^2 = .04, M = 5.07, SD = 1.42$ vs. $M = 4.51, SD = 1.43$), energy-based WF facilitation ($F(1) = 9.45, p < .01, \eta^2 = .06, M = 3.83, SD = 1.23$ vs. $M = 3.18, SD = 1.33$), energy-based FW facilitation ($F(1) = 4.87, p < .05, \eta^2 = .03, M = 5.21, SD = 1.12$ vs. $M = 4.77, SD = 1.27$), behavioral FW facilitation, ($F(1) = 6.18, p < .05, \eta^2 = .04, M = 4.99, SD = 1.21$ vs. $M = 4.46, SD = 1.32$), psychological WF facilitation, ($F(1) = 4.88, p < .01, \eta^2 = .03, M = 4.80, SD = 1.29$ vs. $M = 4.32, SD = 1.45$), and psychological FW facilitation ($F(1) = 6.77, p < .01, \eta^2 = .05, M = 5.65, SD = 1.01$ vs. $M = 5.19, SD = 1.12$) than participants in the scarcity condition. However, contrary to hypothesis, results of a MANOVA on the conflict scales revealed no significant differences between participants in the expansion and scarcity conditions ($F (8, 132) = 0.58, p = ns$).

Emotions
Consistent with our hypothesis, relative to participants in the scarcity condition, participants in the expansion condition reported a higher degree of positive emotions ($F(1, 139) = 3.73, p < .05, \eta^2 = .03, M = 4.85, SD = 1.07$ vs. $M = 4.65, SD = 1.23$) and a lower degree of negative emotions ($F (1, 139) = 4.71, p < .05, \eta^2 = .03, M = 2.39, SD = 1.20$ vs. $M = 2.76, SD = 1.33$) when thinking about combining work and family life.

Spontaneous Thoughts about Combining Work and Family
Of the 143 participants, 125 participants wrote down one or more remarks about combining their work and home life. On average participants provided 2.3 remarks (range 1-10, $SD = 1.57$). There were no significant differences across the conditions in the number of remarks provided ($Ns = 33, 32, 30, 30$). Two independent raters who were blind to our prediction coded each remark as either “positive” or “negative”. They could also categorize a remark as “neutral”. The inter-rater agreement was highly satisfactory (Cohen’s kappa = .88).

Examples of remarks the raters coded as negative are: “Running to and fro, stressing in traffic because you have to pick up your child, and having the
feeling that you’re not performing optimally at work and at home”; “Because of a busy job and making long hours I spend less time with my family than I would like to. I also have very little time for hobbies, like working out. I often have to miss department outings because I have to be home in time to fulfill my responsibilities there. I would like to have more space for quality time”; “Because of the high demands I set for myself, I run short in time. I am tired. I only get it half right. I haven’t got the time to do the things. I would like to do things differently”.

Examples of positive remarks are: “Because of my work, I am certainly a happier person, and as a consequence a better partner and mother at home. I would be very unhappy if I did not have a job, my world would become much too small for me”; “While at work, you’re able to put aside the things you encounter in your home life (change of perspective). Moreover, sometimes the things you learn at work are also applicable at home”; “I feel that having children has a positive effect on my work: 1) I am better able to put aside my work while at home, 2) I am better able to put work matters into perspective, 3) It makes me feel cheerful, children give me a positive feeling.”

To test the hypothesis that participants in the expansion condition would spontaneously report more positive thoughts compared to those in the scarcity condition, we calculated the percentage of positive remarks as a function of the total number of positive and negative remarks for each participant. Analysis of variance revealed a main effect for message ($F(1, 121) = 7.36, p < .01, \eta^2 = .06$, see Table 5.1). As hypothesized, participants in the expansion condition reported more positive thoughts about combining their work and family roles (65.2%) than did participants in the scarcity condition (45.4%). Also, when dividing our participants in three groups, namely, (a) participants who reported a higher percentage of positive than negative thoughts, (b) participants who reported an equal percentage of positive and negative thoughts, and (c) participants who reported a higher percentage of negative than positive thoughts (Table 5.1), results revealed that a greater number of participants in the expansion condition were in a positive mindset than in the scarcity condition.
Table 5.1. Spontaneous Positive and Negative Thoughts about Role-Combining

<table>
<thead>
<tr>
<th>Message</th>
<th>Scarcity</th>
<th>Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean percentages of positive and negative thoughts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive thoughts</td>
<td>45.4%</td>
<td>65.2%</td>
</tr>
<tr>
<td>Negative thoughts</td>
<td>54.6%</td>
<td>34.8%</td>
</tr>
</tbody>
</table>

Participants divided in three groups

<table>
<thead>
<tr>
<th></th>
<th>Scarcity</th>
<th>Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>26 (40.0%)</td>
<td>36 (60.0%)</td>
</tr>
<tr>
<td>Neutral</td>
<td>8 (12.3%)</td>
<td>7 (11.7%)</td>
</tr>
<tr>
<td>Negative</td>
<td>31 (47.7%)</td>
<td>17 (28.3%)</td>
</tr>
</tbody>
</table>

5.8 Discussion

In the present research, we used insights from the transactional model of stress concerning the role of cognitive appraisals in stress experiences (Lazarus & Folkman, 1984) to examine cognitive appraisals relating to the combination of work and family roles. The main purpose of our research was to examine whether cognitive appraisals and experiences regarding this combination can be influenced by informational (appraisal) support. In a field experiment, we provided participants with information that supported either a scarcity perspective on human energy (suggesting that work and family roles can affect one another negatively) or a role expansion perspective (suggesting that work and family roles can have positive effects on each other).

Based on studies in the stress literature showing that cognitive appraisals can be influenced (e.g., Haslam et al., 2004; Lazarus, 1966; Tomaka et al., 1997), we predicted and found that it was possible to change the way in which individuals appraised this combination of work and family life. Employees in the expansion condition appraised role combination as less stressful, less threatening, and more challenging (primary appraisal) than those in the scarcity condition. Moreover, employees in the expansion condition appraised their capacity to cope with role combination (secondary appraisal) as being greater
than those in the scarcity condition. Furthermore, the standard ratio measure of primary to secondary appraisal (Tomaka et al., 1997) indicated that employees in the expansion condition assessed their resources for coping with role combination as exceeding the demands of the environment, whereas, in contrast, employees in the scarcity condition appraised the environmental demands as exceeding their coping resources (see Voydanoff, 2004).

Also confirming our main hypothesis, the study showed that, compared to the scarcity condition, participants in the expansion condition reported experiencing higher levels of facilitation, more positive emotions, and less negative emotions when thinking about combining their work and family lives. However, we found no significant differences in conflict experiences between participants who read the expansion versus the scarcity message. This is an interesting finding that warrants further research. Although speculative, one possible explanation is that scarcity is the predominant social norm that people are exposed to in the workplace (Acker, 1999; Ferree, 1990; Williams, 2000). As a result, it is likely that participants have more often thought about, for example, the way in which time devoted to one role negatively interferes with the other roles they fulfill, thereby making these assessments harder to influence. It might also be the case that some of the zero-sum nature of role-combination is undeniable (or at least that there are reality constraints on this) meaning that this constitutes a source of conflict which is relatively insensitive to appraisal information. This in turn would imply that there is potentially more scope to help individuals become aware of the positive side of combining their work and family roles and recognize how these different roles can facilitate each other. This suggestion maps on to Grzywacz and Bass’s (2003) reasoning that intervention programs should make people become aware of the beneficial side of combining work and family roles, which would make the total assessment of combining work and family more positive.

At the end of our survey, participants were asked to write down their thoughts about combining work and family and told that these thoughts could take any form. These qualitative data, too, revealed very vividly that, compared to the scarcity condition, participants in the expansion condition were more likely to reflect on the positive aspects of combining work and family. Again, this suggests that the expansion message about role combination set in train a more positive thought process about role combining than the scarcity message.

In the present research, we also explored whether the impact of the information depended upon the source providing it by varying whether the alleged scientific information (scarcity vs. expansion perspective) was based on
research findings from within participants’ own organization or another organization (healthcare employees). The social identity approach suggests that appraisal processes are structured by people’s group membership in such a way that people are influenced most by the views of one’s own group (Haslam & Reicher, 2006; McGarty et al., 1994; Turner, 1991). In our research, though, participants were equally affected by the content of the message (expansion vs. scarcity perspective) regardless of the source of this message. Several factors may account for this lack of an effect for source. First, the messages in this study were all said to describe scientific research findings, thereby making the information highly credible and universally valid. As such, receiving “objective information” conceivably made it less relevant whom this information was coming from. Second, the healthcare sector is a sector in which a lot of females work. It is possible that our participants — all female employees — saw this group of employees as a self-relevant group. In many ways, though, the lack of an effect for source makes the present findings even more significant — for it indicates that messages from multiple different sources have the potential to affect the way people cognitively construe the experience of meeting work and life demands.

In sum, this research showed that it is possible to influence the way in which employees cognitively appraise and experience the combination of their work and family lives. Assuming a scarcity perspective on this role combination, the literature has for a long time advanced a one-sided and largely negative view of the work-family interface. Recently, however, scholars have started to pay attention to the positive aspects of role combination by adopting the role-expansion perspective (Greenhaus & Beutell, 1985; Marks, 1977; Voydanoff, 2004). We took these different theoretical perspectives on role combination from the literature and demonstrated that exposure to either one of these perspectives will affect the individuals’ views about role combination. This is important knowledge which suggests that information provided in the media, or by the people around us in our organizations and home lives, all serves to shape the way we appraise and experience the combination of our work and family roles.

From an applied perspective this implies that it is important to pay attention to the way in which these topics are discussed and framed in organizational communication. When employees are repeatedly or chronically exposed to either one of these views this could lead to internalization of that perspective. Thus, when organizations and their agents (e.g., managers) work from an assumption that commitments outside work only distract employees from their work (Acker, 1999; Ferree, 1990; Williams, 2000), the communication of this scarcity perspective will in turn make it more likely that employees also
appraise and experience combining their work and family roles more negatively, and focus on negative thoughts and negative consequences of role-combining. Moreover, although additional research is needed, this research provides a promising first step towards designing an intervention that helps employees to appraise role-combining in a different, more positive light (Grzywacz & Bass, 2003). Previous initiatives have focused on providing employees with formal work–family benefits or programs that support role combination (e.g., better work-time arrangements, day-care facilities, Thompson & Pottrás, 2005) and providing informal support (e.g., managerial support for work-family issues, Thompson, Beauvais & Lyness, 1999; van Steenbergen, Ellemers & Mooijaart, in press). However, alongside these changes, we propose that it may also be beneficial to look into possibilities for intervention programs that aim to enhance positive subjective appraisals and experiences of role combination by providing informational support (appraisal support) that alludes to the positive side of combining work and family.

Strengths of the current research are that it examined employees’ conflict as well as their facilitation experiences in role combination and tested hypotheses experimentally. A recent review of research methods in IO/OB work-family research showed that only a few studies examined the work–family interface through frameworks other than scarcity theory and that scholars almost exclusively relied on cross-sectional and correlational data (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007). In order to advance the field, the authors recommended, amongst other things, examination of the positive as well as the negative side of role combination and the use of experimental research designs. Moreover, we used both structured closed-format response scales and free thought listing methods in order to capture spontaneous associations. Both methods supported our prediction. Finally, a strong and novel feature of the research is that it allows us to make inferences about “real employees with real family responsibilities” because we conducted our experiment among organizational employees who experience role-combining, rather than for instance among students who are unfamiliar with such a situation.

Limitations and Directions for Future Research
Since this study is the first to investigate whether cognitive appraisals regarding the work-family interface can be changed, future research on different ways of manipulating these appraisals is needed to establish the robustness of the present findings. Moreover, the present study was conducted among only a select group of employees, namely women with young children. We selected this relatively
homogenous group of employees for our field experiment to keep constant as many factors as possible and focus on a group of participants for whom concerns about role-combining would be relevant and realistic. Although we expect, on theoretical grounds, that the study’s conclusions would generalize to other groups of employees in other organizational contexts, future research is needed to further confirm this.

Another important avenue for future research would be to investigate the time-span of these effects. It would be interesting to examine how long the effects of informational influence last, whether (and how) these effects could be prolonged (e.g., by providing several repeated messages over time), and when and how internalization of particular views occurs (cf. Turner, 1991). In order to clarify the role that social identity plays in this process (cf. Haslam, 2004), future research should also examine variations in the source providing the information about role combination, for instance by using strong ingroup versus outgroup source manipulations (along the lines of Haslam et al., 2005). In this regard, it would be particularly interesting to examine whether the impact of informational support provided by males or females is dependent upon the gender of the message recipient and also their gender identification in ways predicted by the social identity approach (e.g., Ellemers, Van Rijswijk, Roefs, Simons, 1997; Schmitt, Branscombe, Kobrnowicz & Owen, 2002) At a practical level, such research would provide valuable information about the conditions under which intervention programs which aim to influence individuals’ subjective appraisals and experiences are likely to be successful.

Conclusions
To our knowledge, this is the first study in the work-family literature that examines the role that cognitive appraisals play in shaping people’s understanding of work-life balance. In demonstrating the sensitivity of these appraisals to message content, this research offers new insights into the psychological and practical dynamics that relate to the experience of combining work and family roles. At a theoretical level, a focus on the contribution of cognitive appraisal points to ways in which understanding of the stress of role combination can be enhanced — not least, by taking us beyond the either–or approach of role-expansion and scarcity perspectives. Moreover, at a practical level, the research points to the potential for intervention programs to provide informational support that helps alleviate or prevent stress of role combination.

In both regards, this research encourages a more nuanced perspective on the challenges of combining work and family lives than has prevailed to date.
Cognitive appraisals of the work-family interface

For not only do we see that “there is nothing either good or bad but thinking makes it so”, but so too we see that the basis of that thinking is both social and political. It is not the case, then, that stress is all ‘in the mind’. Rather, it is the society we create (and the messages this communicates) that structures the stresses we have, and it is partly through changes to that society that stress can be overcome (Haslam & Reicher, 2006).