A Resource Perspective on the Work–Home Interface

The Work–Home Resources Model

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The objective of this article is to provide a theoretical framework explaining positive and negative work–home processes integrally. Using insights from conservation of resources theory, we explain how personal resources (e.g., time, energy, and mood) link demanding and resourceful aspects of one domain to outcomes in the other domain. The resulting work–home resources (W-HR) model describes work–home conflict as a process whereby demands in one domain deplete personal resources and impede accomplishments in the other domain. Enrichment is described as a process of resource accumulation: Work and home resources increase personal resources. Those personal resources, in turn, can be utilized to improve home and work outcomes. Moreover, our resource approach to the work–home interface allows us to address two other issues that have thus far lacked a solid theoretical foundation. The W-HR model also explains how conditional factors such as personality and culture may influence the occurrence of work–home conflict and enrichment. Furthermore, the model allows us to examine how work–home conflict and enrichment develop over time. Finally, the model provides useful insights for other psychology subdisciplines, such as gender studies and developmental psychology.

Keywords: conservation of resources theory, personal resources, work–family conflict, work–family enrichment, work–family spillover

As the majority of today's workforce combines work and family responsibilities, the interest in the impact that work–family issues have on employees, family members, organizations, and society is ever increasing (Barnett & Hyde, 2001; Spector et al., 2004). More knowledge about the effects of work on the home domain (and vice versa) seems to be vital for families who are in search of work–life balance, as well as organizations struggling with the 24-hour economy and the lack of flexible, employable employees. The adverse consequences of combining dual roles have been widely demonstrated. Such consequences include time pressure, role conflict, burnout, and impaired health (for an overview, see Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). More recently, however, attention to the possible advantages of participating in both the family and work domains has been growing (Wayne, Grzywacz, Carlson, & Kacmar, 2007). Research-

ers have identified several benefits of occupying dual roles, including an increase in skill and fulfillment levels that facilitate performance in both roles (Graves, Ohlott, & Ruderman, 2007; Ruderman, Ohlott, Panzer, & King, 2002).

The focus in the work–family literature has therefore shifted from perceiving the combination of work and family roles as problematic and as resulting in conflict (Greenhaus & Beutell, 1985) to perceiving work and family roles as, possibly, mutually enriching (Greenhaus & Powell, 2006). Although both perspectives add to the understanding of the possible pros and cons of combining these roles, a strong conceptual framework capable of explaining the depleting and enriching relationships between work and family integrally is, thus far, lacking (Greenhaus, 2008; Weer, Greenhaus, & Linnehan, 2010). In particular, work–family research has been unable to address three compelling questions (Greenhaus, 2008; Ilies et al., 2007; Weer et al., 2010).

First, a major challenge in the work–family research field is to identify clearly the causal process at work in the relationship between work and family. Most research addresses concepts such as work–family conflict (Greenhaus & Beutell, 1985), spillover (Grzywacz & Marks, 2000), interference (Graves et al., 2007), facilitation (Wayne et al., 2007), enhancement (Graves et al., 2007), and enrichment (Carlson, Kacmar, Wayne, & Grzywacz, 2006). These concepts generally suggest that work and family interfere with each other but leave unanswered the question of which factors cause what outcomes.

Second, because empirical studies report both work–family conflict (Eby et al., 2005) and work–family enrichment (e.g., Graves et al., 2007), the following question arises: When is enrichment and when is conflict most likely to occur? Some have suggested that personality plays an

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important role in explaining why some persons seem to experience more work–home enrichment than others (Greenhaus & Powell, 2006; Grzywacz & Marks, 2000). Others have underscored that macro factors, such as cultural values and a country's economic prosperity, may influence when conflict and enrichment are most likely to occur (Lambert, 1999; Spector et al., 2004). Nevertheless, conceptual work–family models that take into account these conditional factors are, thus far, scarce (Spector et al., 2004).

Third, the temporal aspect has been largely ignored in previous work–family research (Demerouti, Bakker, & Bulters, 2004). Because most research has been based on cross-sectional data, we still do not know how the processes of enrichment and conflict develop over time. It is conceivable that we can distinguish between short- and long-term processes. For instance, mood spillover presumably reflects daily interference in the relationship between work and family (Edwards & Rothbard, 2000; Ilies et al., 2007), whereas applying communication skills at work that were learned at home possibly reflects a longer term process (ten Brummelhuis, van der Lippe, & Kluwer, 2010). The often-voiced call in the literature for longitudinal work–family studies has, however, rarely been answered (Ilies et al., 2007; Greenhaus, 2008). The gaps in the work–family literature may be summarized by the following questions: (a) What are the causal processes behind work–family conflict and enrichment? (b) Is work–family enrichment or conflict more likely under certain macro conditions and among employees with certain personality traits? and (c) How do work–home processes develop over time?

Our aim is to build a theoretical framework that provides more insight into what happens when work and home

roles conflict with, or enrich, each other. We adopt a process approach that distinguishes among causes, linking mechanisms, and consequences. Before unfolding our model, we provide a short overview of previous theoretical approaches to the work–home interface. This overview shows which adjustments could further the theoretical thinking in the work–family research field. We refer to the "home domain" instead of the "family" because the former label embraces the various life roles that employees might possess beyond their work roles (Greenhaus & Powell, 2006). The term *work–home* is used for bidirectional processes between work and home, whereas the terms *work-to-home* and *home-to-work* denote unidirectional processes.

Theories on the Work–Home Interface

Previous Work–Family Models

For years, the work–family literature has been dominated by models based on role theory (Pleck, 1977). The basic notion of these models is that employees have limited resources, such as time and energy, for fulfilling roles. Demands or stressors in one domain then make it difficult to meet the demands in the other domain, creating work–family conflict and strain (Frone, Russell, & Cooper, 1992; Greenhaus & Beutell, 1985). Critics have questioned the idea that work and family always are competitors and have instead underscored the possible benefits of occupying dual roles (e.g., Barnett & Hyde, 2001). Apart from this criticism, the conflict approach does not clearly identify the causal processes that link the work and home domains (Grandey & Cropanzano, 1999). Measures of work–family conflict indicate that dual roles are incompatible in some respects, but they do not reveal which factors in one domain make family (or work) functioning more difficult.

Enrichment models (e.g., Barnett & Hyde, 2001; Greenhaus & Powell, 2006) provide more insight into the beneficial linkage between the work and family domains. Gains in resources, such as skills, social support, and self-esteem, are used to explain why experiences in one role may improve the quality of life in the other role (Greenhaus & Powell, 2006; Wayne et al., 2007). However, these resource models are limited to the concept of enrichment and do not answer why sometimes one domain negatively interferes with the other domain. Moreover, both the conflict and the enrichment perspectives neglect systems beyond the work and family domains, such as ecology, culture, and personality, that are likely to affect work–home processes (Parasuraman & Greenhaus, 2002).

A third group of researchers (Hill, 2005; Voydanoff, 2002) conceptualized the work–family interface as a mesosystem, using Bronfenbrenner's (1994) ecological systems theory. Ecological systems theory aims to explain human development by mapping the interaction between the individual and the several systems surrounding the individual. *Microsystems* are used to describe interpersonal relationships and social roles that enable individuals to interact with the social context. *Mesosystems* are conglomerates of two microsystems, including the linkage between those two domains. Other systems described by Bronfen-

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brenner are *exosystems* (a domain that is indirectly linked to the individual), *macrosystems* (cultural values, climate, economic prosperity), and *chronosystems* (development over time, life stage, history). If one uses a system approach, the work–family interface can be seen as a mesosystem consisting of the work and home microsystems, which are interrelated. Ecological systems theory sheds a realistic light on the work–home interface by taking into account macro factors and developments over time. However, this perspective is less clear in its descriptions of system linkages, thereby leaving unanswered how two microsystems affect each other.

In sum, each of the theoretical work–home perspectives discussed has its advantages, but none of them draws an integral and detailed picture of the work–home interface. Therefore, we propose a model that combines these insights. The proposed work–home resources (W-HR) model integrates conflicting and enriching work–home processes and unravels the linking mechanisms while taking into account conditional factors and developments over time. As explained below, conservation of resources theory (COR; Hobfoll, 1989, 2002) offers a useful theoretical foundation for building our W-HR model.

COR Theory

COR theory (Hobfoll, 1989, 2002) is, arguably, one of the most influential theories explaining human stress and well-being. COR theory describes how people react to the stressors they encounter in their environment and how those encounters influence their well-being. The first assumption of COR theory is that people attempt to obtain, retain, and protect resources and that stress occurs when they risk losing, or actually lose, such resources (Hobfoll, 2002). Resources are defined as those objects (e.g., a house),

personal characteristics (e.g., optimism), conditions (e.g., marriage), or energies (e.g., time, money, or physical energy) that are valued by the individual or serve as a means for the attainment of these objects, personal characteristics, conditions, or energies. The first assumption presupposes a process in which people expend resources to address the presence of a stressor. If coping is unsuccessful, or if many resources must be invested, stress will develop (Hobfoll, 2002). For illustrative purposes, imagine an employee who is asked to finish a very important but difficult task. This particular work demand becomes a stressor if the employee knows that she or he will be fired in case of failure. Thus, the resource of employment is threatened. To avoid being fired, the employee expends effort to deal successfully with the task. Several other resources are now also used, including time, cognitive energy, and physical energy. Stress may result when those energy resources are depleted. Moreover, if this effort does not lead to the successful task accomplishment and, consequently, the employee loses his or her job, severe stress is likely to result.

The second central assumption of COR theory is that resources can generate new resources. Hobfoll (2002) described this phenomenon as "resource caravans," meaning that resources come in bundles. In the absence of stressors, people strive to obtain more resources. This activity creates buffers for more difficult times and increases well-being because additional resources per se are valued. Also, people may utilize the resources they already possess to gain more resources (Hobfoll, 2002). For instance, an entrepreneur who has a well-developed social network may be more likely to acquire lucrative assignments. Once obtained, resources appear to create a *gain spiral,* in which resources accumulate. This concept of a gain spiral is clarified by three other assumptions of COR theory. Individuals who possess more resources are more likely to avoid problematic situations, allowing them to invest in gaining more resources instead of being forced to invest to prevent the loss of resources (Assumption 3). In addition, if people who possess resources do encounter stressful situations, then they are better equipped to deal with stressors (Assumption 4). Finally, people with more resources are less negatively affected when they face resource drains because they possess substitute resources (Assumption 5). The gain spiral of resources is also reflected in the sixth and seventh assumptions of COR theory, namely, that the influence of resources tends to hold across time and different circumstances (Assumption 6), and that resources are valued in their own right and those who possess resources are viewed more favorably by both others and themselves (Assumption 7). The creation of new resources from existing resources constitutes an ongoing cycle.

To recapitulate, the seven assumptions of COR theory reflect two main processes: The first is a *loss spiral,* in which stress develops and resources further deplete, and the other is a *gain spiral,* in which resources accumulate (Hobfoll, 1989, 2002).

Types of Resources

Because resources play a central role in COR theory, it is useful to examine more closely, and distinguish among, the different types of resources. The first dimension along which resources can be categorized is the source, or origin, of the resource. Hobfoll (2002) distinguished between contextual resources and personal resources. *Contextual resources* are located outside the self and can be found in the social contexts of the individual. Examples are a home, marriage, or the social support offered by a supervisor at work. *Personal resources* are proximate to the self and include personal traits and energies (Hobfoll, 2002). This distinction helps us understand how employees can utilize resources in their environment to achieve other purposes. For example, job autonomy (a contextual resource) can be used to schedule work in an efficient manner, thus saving time (a personal resource). Additional time can, in turn, be invested in other activities, such as leisure, work, or family. As a result, other contextual resources can be gained (e.g., a good marriage).

The second dimension that categorizes types of resources is the extent to which resources are transient. On one end of this spectrum are *volatile resources*. Those resources are either fleeting in that, once they are used, they cannot be used for other purposes (e.g., time or physical energy) or they are temporal, such as mood or attention (which reflect psychological states that come and go). *Structural resources* compose the other end of the spectrum. Structural resources are more durable assets because they can be used more than once and last for a longer period of time. Examples are a house or a social network that is stable and continues over time. The conceptualization of resources along a spectrum of more structural to more volatile helps us understand the gain spiral of resources. Because structural resources are more stable and last over time, they can be used more than once to deal with stressful circumstances.

Third, we mention *key resources* as a specific subtype that has been identified in resource theory (Hobfoll, 2002). Key resources refer to management resources that facilitate the selection, alteration, and implementation of other resources (Thoits, 1994). They represent several personality traits that enable a more active and efficient coping style (Hobfoll, 2002). Examples are optimism (Scheier & Carver, 1992) and intensity of goal pursuit (Brandtstädter & Renner, 1990). Social power and status fall under key resources as well, as they facilitate the mobilization of other resources, and they make the use of other resources more effective (Mann, 1986). For instance, participation in decision making is more likely to lead to the preferred outcomes for those who occupy a high-status position. The concept of key resources helps us understand how people deal with stressors and how other resources are utilized. For instance, individuals with a more optimistic personality and high self-esteem (key resources) are more likely to begin a difficult task and are more likely actively to seek support for completing their tasks (Hardré, 2003).

Finally, on the basis of Bronfenbrenner's (1994) ecological systems theory, we add another category: macro resources. *Macro resources* refer to characteristics of the larger economic, social, and cultural system in which a person is embedded. Macro resources determine the extent to which individuals need to call upon resources that are more directly in their reach and the extent to which other resources can be used effectively. For example, the presence of public child care enables both spouses to participate in the labor market and makes it unnecessary to search for private day care.

A typology of resources, created by combining the two dimensions, key resources and macro resources, is summarized in Figure 1. This categorization encloses the four types of resources that Hobfoll (1989, 2002) included in his definition of resources. Objects and conditions are positioned in the upper left quadrant because they are durable resources found in social contexts. Energies are placed in the lower right quadrant, reflecting the fact that they are highly volatile resources inherent in a person. The lower left quadrant is represented by volatile resources that are offered by others. This category is labeled "social support" because it refers to the instrumental, informational, emotional, and appraisal support provided by significant others (House, 1981). Such resources are found in the social context but are more transient than conditions (e.g., marriage) and objects. Structural personal resources can be found in the upper right quadrant. We labeled those "constructive resources," such as skills, health, knowledge, perspectives, and experiences.

Key resources are positioned on a higher level, above other personal resources, because they are stable personality traits. Key resources are thus different from other personal traits, such as skills and knowledge, because the latter are less stable and less inherent to a person than are key resources—for example, knowledge can be transferred more easily than can optimism. In a similar vein, macro resources are positioned slightly above the "objects/conditions" box, because macro resources are more stable than other contextual resources and not under the employee's direct control.

As we argue below, the source axis (contextual–personal) is useful for explaining how resources present in one domain can have an effect on another domain (Question 1), while the transience axis (structural–volatile) helps us understand how those processes develop over time (Question 3). Key and macro resources shed more light on the question of the conditions under which work–home conflict and work–home enrichment are most likely (Question 2).

The Work–Home Resources Model

Work–Home Conflict and Enrichment as Processes

The general loss and gain processes described by COR theory can be applied to more specific domains, such as the work–home interface. Stressors help explain how conflict starts between two domains. When related to a specific social context (e.g., work or home), stressors can also be

Figure 1
Categorization of Resources
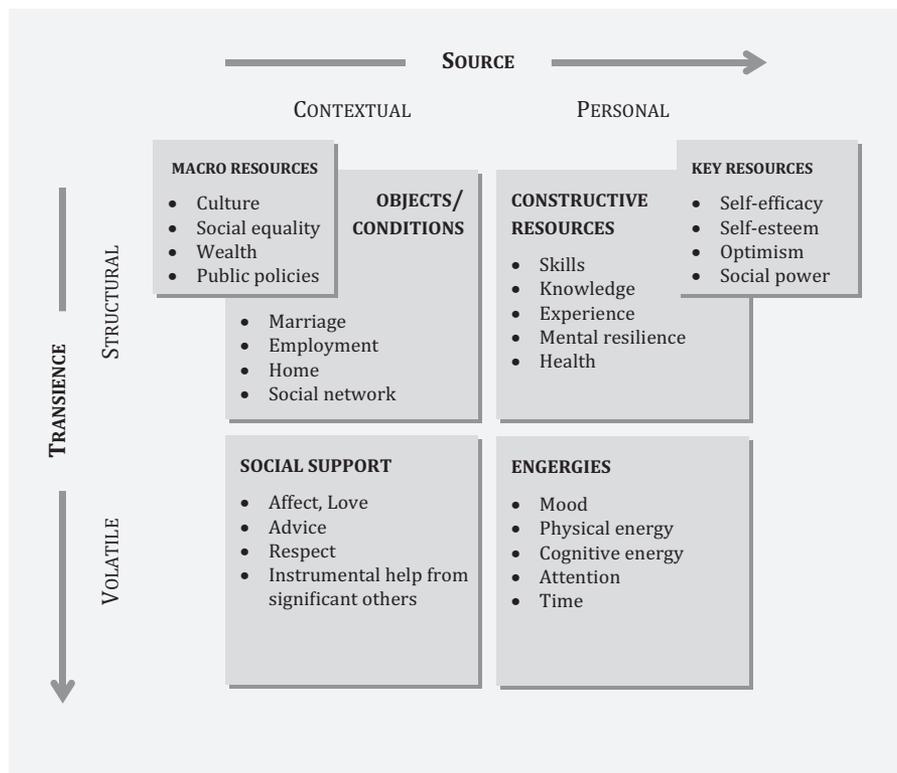
defined more specifically as contextual demands, referring to physical, emotional, social, or organizational aspects of the social context that require sustained physical and/or mental effort (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Peeters, Montgomery, Bakker, & Schaufeli, 2005). Work–home conflict then reflects a process whereby demands in one domain deplete personal resources, resulting in diminished outcomes in the other domain.

Contextual resources, in contrast, seem to be the starting point for enriching work–home processes. In line with the idea of a gain spiral, resources can produce other resources. Work–home enrichment may be understood as the process whereby contextual resources from the home and work domains lead to the development of personal resources. The personal resources developed in each domain subsequently facilitate performance in the other domain. For example, emotional support from the spouse (a contextual resource) may lead to a positive mood and enhanced self-esteem. Those personal resources may, in turn, be used at work, leading to a vigorous and resilient work attitude or even improved work performance (Greenhaus & Powell, 2006; Rothbard, 2001; Ruderman, Ohlott, Panzer, & King, 2002). Thus, whereas *contextual* demands and resources are the causes of, respectively, conflict and

enrichment, *personal* resources are the linking pins between the work and home domains. We are now able to propose an answer to our first question: What occurs when the work and home domains conflict with, versus enrich, each other?

Proposition 1. Contextual work demands diminish home outcomes through a loss in personal resources (work-to-home conflict).

Proposition 2. Contextual work resources improve home outcomes through a gain in personal resources (work-to-home enrichment).

Proposition 3. Contextual home demands diminish work outcomes through a loss in personal resources (home-to-work conflict).

Proposition 4. Contextual home resources improve work outcomes through a gain in personal resources (home-to-work enrichment).

Figure 2 depicts the work–home resources model that results from an application of COR theory to the work–home interface. Here we clarify each component in more detail. *Contextual demands*, either from the work or the home domain, are commonly categorized into quantitative demands (overload), emotional demands, physical demands, and cognitive demands (Bakker & Demerouti, 2007; Peeters et al., 2005). Overload occurs when one needs to

Figure 2
The Work–Home Resources Model
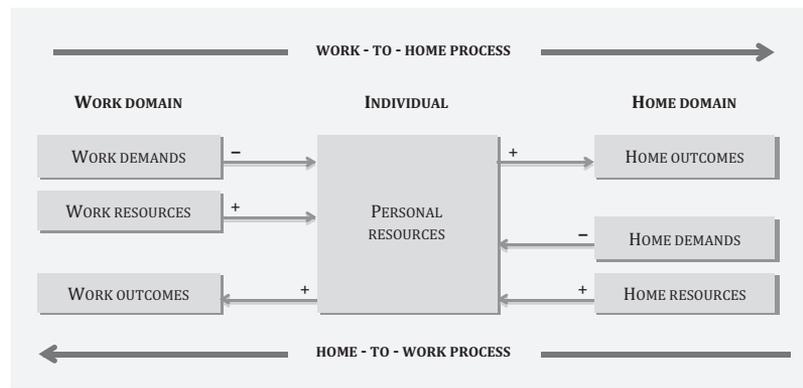
perform many tasks at a high pace. At work, this may entail meeting a deadline, whereas an example from the home domain is household tasks that need to be completed in a hurry. Emotional demands are issues that touch the individual personally and are emotionally draining (spousal conflicts, sexual harassment at work). Physical demands refer to tasks that require physical effort, whereas cognitive demands are tasks that require a lot of concentration, such as multitasking at work or coordinating household tasks (Demerouti et al., 2001; Peeters et al., 2005).

Several *contextual resources* have been identified in previous research, particularly in the work domain (Bakker & Demerouti, 2007; Demerouti et al., 2001). However, contextual resources can be found in the home domain as well (Peeters et al., 2005). Social support refers to either practical or emotional aid from significant others (e.g., co-workers, family members). Autonomy means that the individual can decide how and when tasks are performed. Other common contextual resources are opportunities for development and performance feedback (Demerouti et al., 2001; van Daalen, Willemsen, & Sanders, 2006).

Various *personal resources* have been mentioned in the work–family literature (e.g., Carlson et al., 2006; Edwards & Rothbard, 2000; Graves et al, 2007; Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006; Grzywacz & Marks, 2000; Rothbard, 2001; Ruderman et al., 2002), including physical, psychological, intellectual, affective, and capital resources. Physical resources include physical energy and health. Intellectual resources refer to knowledge, skills, and experiences that help employees discharge their tasks. Affective resources include positive emotions, such as an optimistic mood and feelings of fulfillment. Capital resources are instrumental resources that facilitate role performance, such as money and time. Psychological resources are tools that help people deal actively and efficiently with tasks, such as focus and attention.

Outcomes can be distinguished as production, behavioral, and attitudinal outcomes (Cohen & Bailey, 1997).

Production outcomes at work refer to the efficient and effective creation of products and services. Examples of work production outcomes are efficiency, product quality, and meeting targets. In the home domain, examples of production outcomes are efficient performance of household chores, high quality of care for family members, and realizing leisure targets (e.g., running a marathon). Behavioral work outcomes describe the individual's behavior that indirectly influences more tangible work outcomes, such as levels of absenteeism, employee turnover, and safety. At home, examples of behavioral outcomes are availability for family members, accountability, and the provision of a secure home environment. Attitudinal work outcomes refer to beliefs and feelings that are valued by the employee and the employer, such as job satisfaction, organizational commitment, trust in management, and work-related well-being (e.g., work engagement or low feelings of burnout). In the home domain, attitudinal outcomes include, for example, family satisfaction, good relationships with family members and friends, family commitment, home-related happiness, and home- related well-being (e.g., low feelings of stress).

Table 1 provides an overview of the model's components and specific examples of them.

The Role of Key and Macro Resources in Conflict and Enrichment

Our second question concerns which conditions make work–home conflict and enrichment more, or instead less, likely. We distinguish between conditional factors that are characteristics of the person (key resources) and the context in which he or she is living (macro resources). Key resources provide an explanation for why some people are better than others in coping with stressful circumstances and in collecting new resources. People who possess more of those resources (e.g., optimism, self-efficacy, social power) are better at problem solving and at coping with stress. For instance, ten Brummelhuis, ter Hoeven, Bakker,

Table 1
Overview of the Components of the Work–Home Resources Model

Construct	Subtype	Examples
Contextual demands	Overload	Working overtime, many household chores, urgent care tasks
	Physical	Lifting weights, care for the elderly, care for young children
	Emotional	Dealing with an angry customer, conflicts at home, disappointments
	Cognitive	Writing a report, coordination of household and care tasks, multitasking
Contextual resources	Social support	Advice from co-workers, understanding, love, respect from a friend
	Autonomy	Control over work design, planning leisure time, allocating home tasks
	Opportunities for development	New tasks at work, attending courses, participating in sports, hobbies
	Feedback	Supervisor evaluation, open communication at home, reflection with friends
Personal resources	Physical	Health, physical energy, vigor, sleep
	Psychological	Optimism, self-efficacy, focus, mental resilience
	Affective	Mood, fulfillment, empathy, gratefulness
	Intellectual	Skills, perspectives, knowledge, experience
	Capital	Time, money
Outcomes	Production	Meeting deadlines, service quality, completing tasks, quality of care tasks
	Behavioral	Absenteeism, turnover, availability at home, providing a secure home
	Attitudinal	Satisfaction, commitment, well-being, relationship quality

and Peper (2011) found that intrinsically motivated employees had a more active coping style when confronted with work stress, which led them to collect more job resources to deal with stressors. Likewise, persons high in social power may prevent harmful effects of contextual demands, for example, when a senior consultant has the power to postpone an important deadline. Furthermore, people with key resources are more likely to optimally utilize their contextual resources. For example, persons high in conscientiousness are generally well-organized, goal oriented, and hardworking (McCrae & Costa, 1986). Those persons may then use job autonomy to plan activities more efficiently, thereby saving time that they can use for other (nonwork) purposes.

Macro resources depict macro level facilitators that surround the work–family interface, such as general wealth conditions, public policies, presence of labor unions, cultural values, and social equality (e.g., absence of racism). Subsidized public child care may enable dual earner couples to combine work and family life in the first place. Also, in wealthy countries, the economic necessity for both partners to work is lower, and a larger number of workers have high-status jobs. In those countries, employees may derive more resources (e.g., fulfillment) from their jobs, while they have sufficient buffers to cope with work stress (Lambert, 1999). Cultural values have also been shown to moderate work–family processes (Spector et al., 2004). For instance, in collectivist countries, employees perceive long work hours less as a stressor because it is considered as a worthwhile means to the valued goal of maintaining the family (Spector et al., 2004). As another example, unlike societies in which racism is common, societies that treat social groups equally enable all individuals to actually use

several contextual resources (e.g., participation in decision making at work).

In short, key and macro resources seem to be conditional factors that prevent and attenuate work–home conflict while simultaneously fostering work–home enrichment.

Proposition 5. Work–home conflict is less likely among persons with key and macro resources because key and macro resources attenuate the negative relationship between contextual demands and personal resources.

Proposition 6. Work–home enrichment is more likely among persons with key and macro resources because key and macro resources strengthen the positive relationship between contextual resources and personal resources.

Figure 3 depicts the moderating effects of key and macro resources in the work–home resources model.

Short-Term and Long-Term Processes

Hobfoll (2002) mentioned that stressors and the resulting strain may be temporal or may instead have a more chronic character. If stressors are chronic, one risks ending up in a downward loss spiral. The loss spiral reflects a process whereby a first loss in personal resources that is due to contextual demands induces further loss because there are fewer personal resources available to deal effectively with the chronic demands or to collect contextual resources. Likewise, stable contextual resources may lead to a gain spiral in which resources accumulate. Structural contextual resources enable one to avoid or solve contextual demands and to collect new resources. Empirical studies have provided preliminary evidence for gain and loss spirals of work-related burnout and engagement (Schaufeli, Bakker, & Van Rhenen, 2009; ten Brummelhuis et al., 2011).

Figure 3
Conditions Attenuating and Strengthening Work–Home Conflict and Enrichment
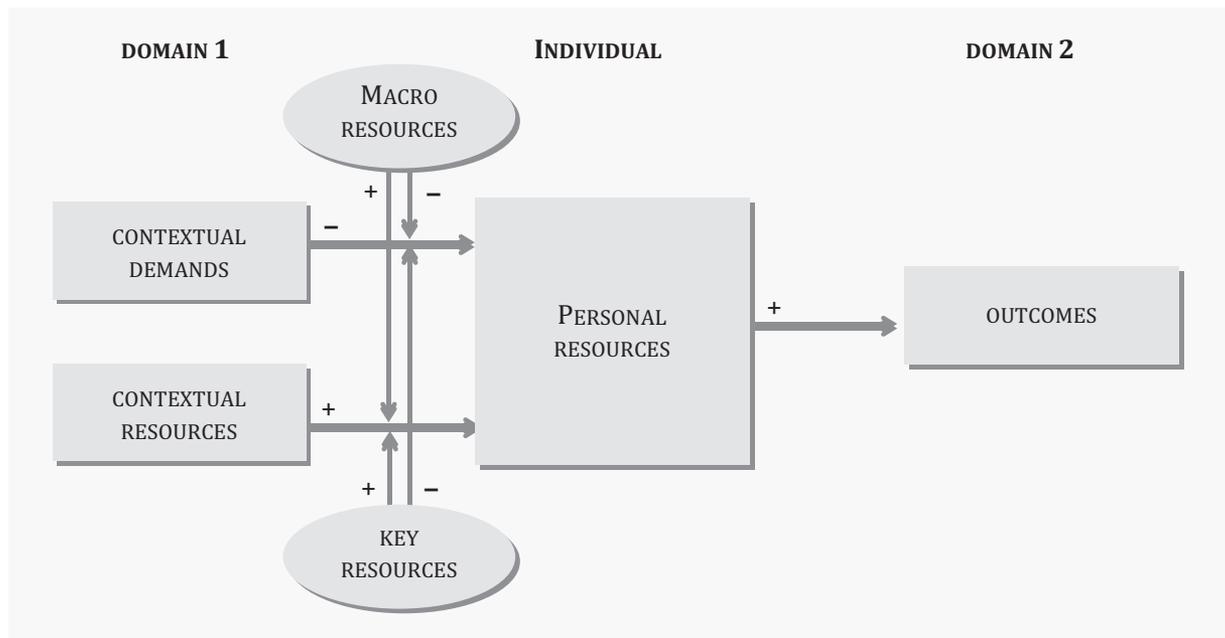
We suggest that long-term processes can also be found in the work–family interface. More chronic or structural demands in one domain require a continuous investment of personal resources. This depletion process eventually consumes more structural personal resources (e.g., health), and deteriorates long-term outcomes in the other domain. For example, ongoing family overload has been shown to increase physical stress, which accumulates in health complaints, and eventually results in more absence from work in the consecutive year (ten Brummelhuis, ter Hoeven, De Jong, & Peper, 2012). Likewise, structural contextual resources in one domain are likely to facilitate employees to accomplish long-term goals in the other domain via more stable personal resources. For example, employees who have an extensive social network are more likely to find a better job, because they have more knowledge about the labor market (Bernasco, de Graaf, & Ultee, 1998). In contrast to those long-term processes, there are also short-term work–home processes that occur on a daily basis (Ilies et al., 2007). In a daily diary study, Ilies et al. (2007) showed that daily job demands enhanced daily experienced work-to-home conflict and reduced employees' engagement in social activities with family members.

The transience axis, on which personal resources can be positioned as being more volatile or more structural, may help us to understand when short-term work–home processes occur and when long-term work–home processes occur instead. We suggest that temporal demands and volatile resources in one domain consume and produce volatile personal resources (i.e., energies). The consequences for the other domain are then also more immediate, such as spousal conflicts on days on which the employee has no time or energy to participate in family life due to unforeseen overwork. As clarified above, chronic demands and structural resources in one domain will bring about longer term effects in the other domain via a loss or gain in more structural personal resources (i.e., constructive resources). Adding to our third question, regarding how work–home processes develop over time, we suggest that the work–home interface consists of both short-term and long-term processes (see Figure 4).

Proposition 7. Short-term work–home conflict and enrichment reflect daily processes between the work and home domains, whereby *volatile* contextual demands and resources from one domain affect daily outcomes in the other domain through a change in *volatile* personal resources.

Proposition 8. Long-term work–home conflict and enrichment reflect durable processes between the work and home domains, whereby *structural* contextual demands and resources from one domain affect long-term outcomes in the other domain through a change in *structural* personal resources.

Discussion

Previous studies have suggested that work–home enrichment and work–home conflict are two distinct processes, each having specific antecedents (Boyar & Mosley, 2007).

Figure 4
Long-Term and Short-Term Work–Home Processes
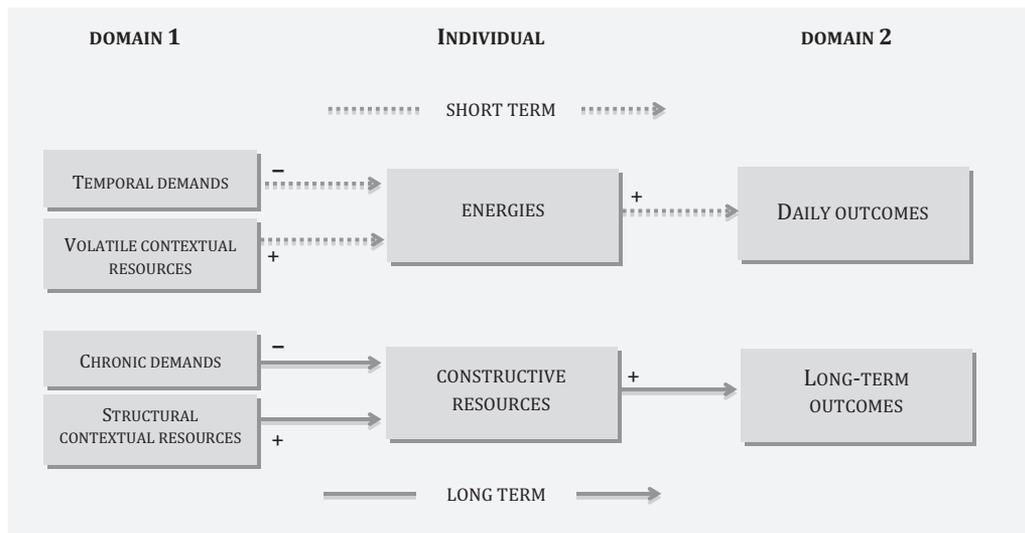
However, an integrated theoretical model that helps account for both conflict and enriching relationships between the work and home domains has, thus far, been lacking. In the work–family research field, there is an urgent need for answers to such questions as What happens when work and home roles conflict with, versus enrich, each other? Who is more likely to experience conflict or, instead, enrichment? and How do work–home processes develop over time? (Greenhaus, 2008; Grzywacz & Marks, 2000; Ilies et al., 2007). We sought to develop a theoretical framework that could be used as a starting point for the empirical investigation of these questions. We used COR theory (Hobfoll, 1989, 2002) as a starting point for our own theoretical assumptions. This approach led us to view work–home conflict and enrichment as processes comprising antecedents, mechanisms, and outcomes. The resulting W-HR model advances the work–family literature in several ways.

To begin with, the W-HR model provides a more informative view of what occurs when the work and home domains conflict with or enrich each other. Work–home conflict can be defined as a process whereby contextual demands in one domain drain personal resources, leaving insufficient personal resources to function optimally in the other domain. In contrast, work–home enrichment reflects the process whereby resources in one domain replenish, or add to, one's personal resource supply. Subsequently, performance in the other domain improves. This process view extends previous work–family studies that employed concepts referencing the relationship between work and family itself, such as work–family conflict, interference, and spillover (Demerouti et al., 2004; Grandey & Cropanzano, 1999; Grzywacz & Marks, 2000) as well as research that focused on participation in, or commitment to, work and

nonwork roles (e.g., Graves et al., 2007; Ruderman et al., 2002; Weer et al., 2010). Although concepts that assume interference help depict possible problems that employees face when they combine dual roles, they do not depict clearly which home and work factors are beneficial or harmful to the other domain, nor do they identify the exact consequences attending the presence of these factors. The W-HR model overcomes this problem by relating tangible antecedents in the home and work domains (contextual demands and resources) to concrete work and home outcomes (production, behavioral, and affective outcomes).

In addition, the W-HR model eliminates the theoretical black box between work and home by providing an overview of the mechanisms that link work and home. Changes in personal resources, either more volatile ones (e.g., time, physical energy, positive mood) or more structural ones (e.g., skills, perspectives), are identified as linking mechanisms between the two domains (Carlson et al., 2006; Wayne et al., 2007). Thus, the W-HR model does not include measures of work–home interference but unravels the underlying mechanisms that link both domains. This theoretical understanding allows us to circumvent any possible bias introduced by work–home interference measures that presuppose the causal direction of work–home relationships.

Our model also provides an answer to the question of the role personality plays in the development of work–home conflict and enrichment. The key resources that are included in the W-HR model help us understand which individuals are more or less prone to experience work–home conflict or enrichment. Because key resources (e.g., self-efficacy, optimism, and self-esteem) facilitate efficient and effective coping with contextual demands while optimizing the use of contextual resources, persons who have more key resources are more

likely to experience work–home enrichment and less likely to experience work–home conflict.

In addition, the W-HR model is applicable to a variety of employees with different jobs and family situations and from various countries and cultures. The resources perspective enables us to model the demands and resources an employee has in each domain, making the model suitable for diverse jobs (e.g., low-wage work and management positions) and family situations (e.g., single parents and dual earner couples). More structural differences between countries, economies, and cultures are accounted for by modeling macro resources. Our model thus responds to the call in the literature to provide more universal work–family models that take into account the diversity of today's workforce and workplaces (Lambert, 1999; Spector et al., 2004; Swanberg, 2005).

Furthermore, the W-HR model enables researchers to distinguish between long-term and short-term work–home processes. More transient personal resources, such as time, mood, and energy, are likely to explain daily work–home processes. For example, sleep deficit due to care for a newborn is likely to impair concentration or mood at work during the next work day. By contrast, chronic family overload may lead to a loss of more structural personal resources (e.g., impaired health), which hinders long-term work outcomes. Similarly, more structural personal resources, such as skills, are likely to explain work–home processes that take more time to develop, such as becoming a more understanding and patient manager because of interpersonal skills learned while raising children (Ruderman et al., 2002).

Finally, our model gives direction for the question of when conflict, or instead enrichment, is most likely to occur. First of all, whether home and work conflict with or enrich each other depends on the specific combination of contextual demands and resources (Bakker, ten Brummelhuis, Prins, & van der Heijden, 2011). Low resources and high demands in one domain are likely to worsen outcomes in the other domain (work–home conflict), whereas low contextual demands and plenty of contextual resources facilitate outcomes in the other domain (work–home enrichment). Second, having a lot of macro and key resources will enhance the chance of enrichment while making conflict between the two domains less likely.

Relevance for Other Psychology Subdisciplines

The W-HR model was designed to add to our understanding of the interrelatedness of work and family. On the one hand, the model clarifies how family outcomes, such as marital quality and task performance at home, may be affected by work characteristics. On the other hand, industrial/organizational psychology may benefit from the insights provided into how an employee's home domain may influence work outcomes and for which employees (e.g., those having high family demands and low key resources) additional work–life support may be useful. On top of that, the model can be extrapolated to other research fields. Our model resembles a mesosystem as described in Bronfenbrenner's (1994) ecological systems theory (Voydanoff,

2002). The W-HR model depicts in detail how two microsystems (work and home) influence each other. This approach can be applied to other domains as well. For example, one could study how the home domain affects school performance. Also, one could map the W-HR mesosystems of multiple related persons, such as the work domains and the family domains of both partners in a relationship. This mapping may contribute to social psychology, allowing investigation of how the contextual work demands and resources of both partners influence, for example, parent–child interaction or interaction between spouses.

The basic assumptions of our model may also be relevant for developmental psychology in examining how a person develops over time. Development then would reflect the process by which demands and resources from various microsystems that surround a person deplete or enrich his or her personal resource arsenal over time. These insights may also be of value for counseling psychology and medical psychology. Answers to questions such as why certain persons develop mental disorders (e.g., depression, anxiety) in response to stressors can be sought in the person's available resources. For instance, when losing a job, a person with mental resilience and a supportive social network is less likely to end up in a depression than a person who lacks such personal and contextual resources.

The model also opens avenues for modeling cultural differences in the work–home interface, contributing to multicultural psychology (Spector et al., 2004). One could, for instance, examine how work and family affect each other in countries differing in collectivism/individualism and in low/high power distance. Also, the model may be used to explore whether ethnic minorities may have additional difficulties in combining work and family, as they may be confronted by racism and have lower social power.

Likewise, possible differences between genders, and other social identities, could be modeled. Men and women may be influenced differently by cultural norms on gender roles, and they may differ in social power and role salience (Barnett & Hyde, 2001). A contribution for gender studies, therefore, could be to examine whether the processes of the W-HR model are similar for men and women (and other social identities) and whether groups differ in the contextual and personal resources that are available to them.

Implications for Research

A comprehensive research program could be developed to test the validity of the model proposed in this article. To facilitate this research, validated measures of home demands and home resources must first be constructed. Measures for several job demands and job resources that have already been developed and validated (Demerouti et al., 2001) are also applicable to the home domain. Examples are overload at home, emotional home demands, and social support from family members and friends (Peeters et al., 2005; van Daalen et al., 2006). Work–home research would also benefit from validated measurement instruments relevant to the linking mechanisms, such as context-free time management and communication skills.

Furthermore, we encourage researchers to use research methodologies that permit the examination of the causal direction of these relationships. Diary methods (Bolger, Davis, & Rafaeli, 2003) are possibly of great help. Diary studies enable researchers to relate work (or home) antecedents measured at Time 1 to home (or work) outcomes at Time 2. For example, the workload during the day and the real-time energy level reported immediately after work ends can be used as predictors of home outcomes reported at the end of the evening (Ilies et al., 2007). Moreover, it would be interesting to test the time frames in which work–home processes develop. Diary studies enable the researcher to model daily fluctuations in contextual demands and resources, personal resources, and outcomes. In this way, one could test the hypothesis that particular changes in energy resources are responsible for daily interference between work and home. Longitudinal studies using a longer time frame would be useful to test the hypothesis that loss and gain in more structural personal resources influence work and home outcomes in the long run.

In addition, research on possible moderators of work–home processes would be a valuable contribution to the work–family research domain. As suggested by the W-HR model, personality (key resources) presumably plays an important role in spillover effects between work and home (Boyar & Mosley, 2007; Grzywacz & Marks, 2000). The wider macro context could also act as a moderator on work–home processes. For example, cultural norms that advocate both men's and women's participation in paid work and childcare may facilitate work–home enrichment. Likewise, possible differences between men and women could be examined. As argued before, role salience, cultural beliefs about role division, privileges, and social power should all be taken into account when studying such differences (Voydanoff, 2002). Similarly, it is plausible that work–home conflict and enrichment differ between groups varying in race, immigrant status, and sexual orientation. Future studies should address whether any differences may be due to the differences in social power, privilege, role salience, and cultural/social expectations.

Another suggestion for future research is to investigate the relative importance of enriching versus depleting processes. Although it is evident that both processes can coincide, it is still unknown whether one of the two processes occurs more frequently or whether one process outweighs the other. For instance, home life may be demanding, entailing, for example, emotionally and physically draining care for children. However, support from the spouse, or quality time spent with family members, may counterbalance this drain in energy and may even lead to additional skills and perspectives in the long run (Ruderman et al., 2002; ten Brummelhuis et al., 2010). It would be interesting to examine how conflicting and enriching processes alternate with each other, or whether either of the processes is more dominant, by investigating, for example, how frequently work–home conflict versus work–home enrichment occurs on a daily level.

A further extension of the W-HR model would be to examine combined effects of contextual demands and resources. From the organizational literature, we know that employees can deal with a certain amount of job demands provided that there are enough job resources available (Bakker & Demerouti, 2007). Also, unlike hindering demands, challenging job demands are assumed to be beneficial because they motivate employees and provide an opportunity to learn new skills (Crawford, LePine, & Rich, 2010). It would be interesting to examine the interaction effects of contextual demands and resources on a person's resource supply. Distinguishing between challenging and hindering contextual demands may also be a worthwhile refinement of the W-HR model.

Finally, including feedback loops may widen our understanding of how work–home processes develop over time. Low or high role accomplishment can be seen as a loss or gain in contextual resources (Hobfoll, 2002), starting a new work–home process. For instance, success at work may result in vigor, which the employee may invest in quality time with the partner. On the next day, satisfaction with one's relationship may put the employee in a good mood, leading him or her to help colleagues at work. Such spiral-like effects are also congruent with Bronfenbrenner's (1994) chronosystem of human development.

Concluding Note

The W-HR model provides a new theoretical perspective for the work–family research field by viewing the work–home interface as a set of processes. Each process runs from demands and resources in the work (or home) domain, via changes in personal resources, to outcomes in the home (or work) domain. We believe that the W-HR model offers a useful framework for future work–home research, allowing an investigation of what actually occurs when work and home interfere with each other. We encourage researchers to use the model as a starting point for testing the numerous research questions in the work–home research field that are yet to be answered.

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