2. THEORY

2.1. Conceptual Framework

The purpose of this section is to introduce the theories and concepts that shape the approach of investigating interpersonal contributions to the pursuit of work and family goals in middle adulthood. The life-span perspective of developmental psychology serves as an overarching framework (P. B. Baltes, 1987; P. B. Baltes et al., 1998).

People can be seen as active agents who shape their own development through a dynamic interaction with characteristics of the changing context within which they are embedded (Brandtstaedter, 1999; Lerner & Walls, 1999). This indicates that human development cannot be adequately understood without consideration of both those personally meaningful objectives that people set and actively try to achieve (Brunstein et al., 1999) and the environmental forces that influence which goals are chosen and how they can be accomplished (Oerter, 1986). This study therefore focuses on the setting of personal goals in employed parents and the special developmental circumstances they meet in their attempt to follow them.

The life-span approach holds that development is a lifelong process including both continuity and change. While goals are relatively stable objectives that guide behavior over time, they are also dynamic in that they change in response to different developmental contexts. Each age period has its own developmental agenda characterized by an ongoing process of transactional adaptation within specific developmental contexts (P. B. Baltes et al., 1998). In this study the main focus is on middle adulthood, especially the goals that guide behavior during that particular phase in life.

Three intertwined intra- as well as extra-personal contextual forces are assumed to have an impact on personal development (P. B. Baltes et al., 1980; P. B. Baltes & Smith, 2004). First, normative age-graded influences refer to those biological and environmental forces that are closely tied to chronological age. They are proposed to shape individual development in relatively normative ways. An example is developmental tasks that individuals are expected to work on during different periods of their life (Havighurst, 1952; Cantor & Sanderson, 1999). A detailed description of the concept of developmental tasks and the types of projects that are characteristic of middle adulthood will be provided in a later section. Second, history-graded influences pertain to the specific historical and societal circumstances that shape individual development, differing for successive cohorts. Changing roles and norms are examples of such influences (Hagestad & Neugarten, 1985; Settersten &

Mayer, 1997). Hence, one needs to consider the current societal expectations concerning work and family with regard to the women and men of this study. Both normative age-graded as well as history-graded factors influence many individuals in a similar way. And third, non-normative influences such as the death of a friend or serious illness are usually unpredictable and describe the idiosyncratic environmental and biological forces that often have a powerful impact on individual development (Brim & Ryff, 1980).

Another important premise of the life-span approach is that development is always comprised of gains and losses. Successful development is characterized by the maximization of gains and the minimization of losses (P. B. Baltes et al., 1998). Within this very general description of developmental success, two questions arise. First, how does one identify developmental success and second, what structural and procedural antecedents contribute to developmental success?

Despite the fact that the first issue raised is central to almost all research conducted within the field of developmental psychology, no standard set of criteria exists that could be used in the evaluation of developmental success. On a theoretical level researchers agree that developmental success should be investigated using multiple criteria covering subjective, objective, as well as behavioral indicators. Over and above this, one might need to distinguish between domain-specific and domain-general as well as short-term and long-term success (M. M. Baltes & Carstensen, 1996; Frankenhaeuser, 1994; Schwarz & Strack, 1999). This study tries to take this into account by investigating developmental success at three levels: Behavior, experience, and physiology. Goal pursuit is employed as a behavioral indicator, subjective well-being serves as an experiential indicator, and physiological arousal as indexed by free cortisol in saliva is used as a bodily indicator of developmental success. Through a microanalysis of daily life combined with an assessment of global consequences, processes operating at different levels of abstraction will be considered. I will return to this issue in more detail in a later section.

The second issue is the one of structural and procedural antecedents of successful development. Accounting for this, P. B. Baltes and M. M. Baltes (1990) developed the model of selective optimization with compensation (SOC), which has been applied to various domains of functioning (e.g. Freund & P. B. Baltes, 2000; Lindenberger & P. B. Baltes, 1995). According to this model people have to be *selective* for an effective regulation of developmental processes to take place, because resources are limited throughout the entire life span. It is assumed that when setting their personal goals individuals prioritize domains reflecting changing developmental tasks and themes of life (P. B. Baltes et al., 1998). Hence,

people ideally have a selected set of personal goals that express their age-related developmental projects. Freund and P. B. Baltes (2000) point out that among other factors, personal goals need to be integrated into a system of coherent goals, because this facilitates successful goal pursuit as it *optimizes* means. *Compensation* as the third principle of the SOC model refers to the acquisition of new goal-directed means if previously available resources are lost (P. B. Baltes et al., 1998). Even though this model has primarily been used to investigate successful development at the individual level, M. M. Baltes and Carstensen (1998) as well as Freund and P. B. Baltes (2000) suggest also considering group processes that facilitate or hamper goal pursuit. Because people live in social networks such as families, they interact with each other. Hence, when investigating the combination of work and family goals in the present sample of employed parents, it seems important to go beyond an investigation of individual-level processes and examine how closely-interrelated persons influence each other, thus producing more or less favorable outcomes for everyone involved.

2.1.1. On the Role of Personal Goals in Development

Life-span psychology claims that development is a process of transactional adaptation that has a gain-loss dynamic (P. B. Baltes et al., 1998). Personal goals can be described as future-oriented representations of the self that express what a person wants to achieve during a certain phase in life and that form the basis by which success in central life domains is evaluated (Austin & Vancouver, 1996; Brunstein et al., 1999; Heath, Larrick, & Wu, 1999). As purposeful agents people not only direct their own development through the setting and pursuit of personally meaningful goals but also as they move through life encounter constraints and experience failures that are not under control of the developing individual and need to be dealt with in order to achieve a favorable balance between gains and losses (Brandtstaedter, 1999; Brandtstaedter, Wentura, & Rothermund, 1999). Following this notion, personal goals are thought to play an ambivalent role in development: "On the one hand, they give structure and motivating meaning to life . . . On the other hand goals turn into sources of dissatisfaction and depression when they become unattainable or exceed individual resources" (Brandtstaedter & Rothermund, 2002, p. 118).

Accordingly, the construct of personal goals is of central interest to research in the area of both action-theory as well as stress and coping (Brandtstaedter & Lerner, 1999; Frese & Sabini, 1985; H. Heckhausen, 1991; J. Heckhausen, 1999; Lazarus, 1991). Despite the fact that, historically, these two lines of research originate from different research traditions with the former focusing on the active and efficient pursuit of goals and the latter being concerned

with coping with adversity, today many concepts in either area share a common interest and capitalize on the elaboration of processes that foster optimal development (Boekaerts, Pintrich, & Zeidner, 2000; Brandtstaedter & Rothermund, 2002; Frese & Sabini, 1985; Freund & P. B. Baltes, 2000; Schwarzer, 1999; Zeidner & Endler, 1996). The aim of this section is to introduce research on personal goals that is concerned with three aspects: First, the positive role of personal goals for self-directed development. Second, the vulnerabilities personal goals can entail. And third, models of self-regulation that describe the mechanisms associated with successful goal pursuit.

Theory and empirical studies provide ample evidence for the positive role that personal goals play in development. Telic theories of well-being for instance propose that happiness is gained when personal goals are reached (Diener, 1984). Research on personal goals shows that the setting, pursuit, and attainment of personally important goals contribute to personal growth, well-being and mental health (Brandtstaedter & Rothermund, 2002; Brunstein & Maier, 2002; Diener & Fujita, 1995; Emmons, 1996; Hooker & McAdams, 2003; Little, 1998; Sheldon & Elliot, 1999). Hence, personal goals seem to be important factors that can contribute to a successful development.

However, present research also points out that personal goals can become a great source of distress (Brandtstaedter et al., 1999). According to the cognitive theory of psychological stress by Lazarus (1991) for instance, personal goals play an important role in the appraisal of an encounter and available coping options and define what is at stake for a particular person in a given situation. Emotional and physiological stress responses occur if an encounter is appraised as being both goal-relevant and goal-threatening (Lazarus, 1991; 1993). Empirical evidence supports this notion by showing that goal-blockage and goal hindrance are related to various indicators of distress (McIntosh & Martin, 1992; Klinger, 1977; Kuhl, 2001; Wrosch, Scheier, Miller, Schulz, & Carver, 2003). Hence, despite the fact that goal-setting and goal pursuit seem to be important features of successful development, personal goals also define those areas in life where people are particularly vulnerable to stress. This raises the question of what people can do in order to reach their goals. In the following paragraphs this question will be addressed using the concept of self-regulation.

Models of self-regulation have been the target of investigations in both action-theoretical research as well as studies on stress and coping. At the most general level, the term self-regulation encompasses the processes through which people regulate their thoughts, feelings, and actions in accordance to their goals and standards (Baumeister, 2001; Boekaerts, Pintrich, & Zeidner, 2000). In the following paragraphs I will now turn a description of

several models of self-regulation that play a dominant role in the action-theoretical and coping literature. For ease of presentation these self-regulatory models are grouped into three categories, namely control-related conceptualizations (Carver & Scheier, 2002; Brandtstaedter & Rothermund, 2002; J. Heckhausen, 1999), phase-specific conceptualizations (Gollwitzer & Moskowitz, 1996; H. Heckhausen, 1991), and proactive coping conceptualizations (Schwarzer, 2000; Aspinwall & Taylor, 1997).

The control process model by Carver and Scheier (1982; 2002; Wrosch, Scheier, Miller, Schulz, & Carver, 2003) explains self-regulatory processes in terms of feedback-loops. According to their model, people repeatedly monitor their current status, compare it with their personal goals, and adjust their own behavior countering environmental disturbances in order to reduce discrepancies between current status and goals until a specific goal-relevant action is successfully completed. Alternatively, if failures and stagnation persist, people exit this cycle and disengage from unattainable goals. The model of assimilative and accommodative coping by Brandtstaedter and colleagues (Brandtstaedter & Rothermund, 2002; Brandtstaedter et al., 1999) describes self-regulation using a hierarchy of feedback-loops. Therein, assimilation refers to individual efforts to actively change unsatisfying situations to attain a closer fit with personal goals. Accommodative coping oftentimes comprises sub- or nonintentional processes and mechanisms that aim at eliminating aversive discrepancies between actual situation and goal by flexibly adjusting personal goals to available action resources. Assimilation and accommodation are thought to work antagonistically. The theory of control by J. Heckhausen and colleagues (J. Heckhausen, 1999; J. Heckhausen & Schulz, 1995; Wrosch, J. Heckhausen, & Lachman, 2000) specifies two intertwined self-regulatory processes. Primary control refers to actions directed at the external world and involves attempts to change the environment to fit personal goals. Secondary control encompasses cognitive processes directed at the self and involves efforts to adapt to the external world through disengagement from unattainable goals and positive reappraisals in order to optimize levels of primary control.

Phase-specific conceptualizations of self-regulation are concerned with the course of action (H. Heckhausen, 1991; Gollwitzer, 1990; Gollwitzer & Moskowitz, 1996). Here the decision to act plays a key role as explicated by the metaphor of crossing the Rubicon (H. Heckhausen, 1991). The cited authors propose a self-regulation model that distinguishes between four consecutive, qualitatively different action phases. The process of self-regulation begins with the selection of a binding goal, followed by the specification of an implementation plan. Then, people have to jump on all action opportunities and circumvent

difficulties in the pursuit of their goals. In the end, achievements are evaluated by comparing them with the chosen goal.

Proactive coping theories address self-regulatory processes that precede anticipated threats and challenges (Aspinwall & Taylor, 1997; Schwarzer, 2000; Schwarzer & Taubert, 2002). According to Schwarzer (Schwarzer, 2000; Schwarzer & Taubert, 2002), proactive coping is characterized by the acquisition of resources and skills that promote the ability to master demanding situations in the future. As such, proactive coping creates conditions that foster the management of goals and contribute to quality of functioning. As a result the individual is well equipped and appraises upcoming encounters as challenge rather than threat. Aspinwall and Taylor (1997) describe proactive coping in terms of feedback-loops and propose five interrelated tasks that help people to offset or eliminate stressors before they occur. The process starts with the accumulation of resources and continues with the recognition of upcoming encounters, which is followed by an initial appraisal of potential stressors. This appraisal is followed by initial coping efforts aimed at preventing or minimizing suspected stressors. And finally, the elicitation of feedback serves the modification of initial appraisal and initial coping efforts.

Taken together, present research indicates that personal goals can do both: promote successful development and put an individual at risk of experiencing stress. Additionally, it has been shown that goal-directed development requires a multitude of resources, skills, and opportunity structures. Hence, within the context of this study, it is important to consider which goals are chosen by employed parents and how these personal goals are related to contextual resources and constraints, to attend to differences in opportunity structures for the pursuit of personal goals, and to examine how these factors interrelate to produce more or less favorable developmental outcomes. In the next section I will start by focusing on factors that have an impact on the content domains of personal goals people set in middle adulthood.

2.1.2. Contextual Factors and their Impact on the Content of Personal Goals in Middle Adulthood

The life-span model holds that age-graded, history-graded and non-normative influences work together in shaping developmental contexts (P. B. Baltes et al., 1998). The following section will concentrate on age-graded and history-graded influences because they have a similar impact on most individuals of a given cohort, while non-normative factors are highly idiosyncratic (P. B. Baltes et al., 1998). Besides the fact that personal development is influenced by these contextual forces, individuals are at the same time active agents of their

own development as they set and pursue personally important goals (Brandtstaedter & Lerner, 1999). By introducing the concept of developmental tasks representing age-graded influences and the concept of the social clock which expresses the history-graded context, I will ask which themes are most salient in middle adulthood, as it can be assumed that these themes will be present in the goals employed parents set for themselves.

The concept of developmental tasks explicates those demanding projects that individuals need to work on at different stages of their life (Cantor & Sanderson, 1999). Research on developmental tasks goes back to Havighurst (1952). According to Havighurst a "developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks" (Havighurst, 1952, p. 2). Hence, it is assumed that each period of life can be characterized by a certain set of demanding projects whose management is reflected by high levels of well-being and has an impact on later life as it provides the basis on which new tasks can be approached. Research using different age-groups supports this notion by showing that an active participation in personally and culturally valued tasks has a pronounced impact on well-being (Cantor & Sanderson, 1999; Lachman & Weaver, 1998; Lachman & Bertrand, 2001; Ryff & Heidrich, 1997; Whitbourne & Connolly, 1999). Following this vein, success at earlier phases in life is crucial for successful development in later life. The focus here will be on the management of tasks proposed for young and middle adulthood, as this is the phase in life this study is concerned with. Young adulthood covering the ages of 18 to 30 is the time that requires the selection of a mate, learning to live with a marriage partner, starting a family, rearing children, managing a home, getting started in an occupation, taking on civic responsibility and finding a congenial social group. Middle adulthood (ages 30 to 55) is concerned with achieving adult civic and social responsibility, establishing and maintaining an economic standard of living, assisting teen-age children to become responsible and happy adults, developing adult leisure-time activities, relating oneself to one's spouse as a person, and accepting and adjusting to the physiological changes of middle age (Havighurst, 1952). Havighurst describes a rather broad range of phenomena. According to his proposition, one would assume that family- and work-related topics are central to the lives of women and men in middle adulthood. Because success or failure has a profound impact on later life, differential ways of integrating these topics into individual lives will be investigated.

Another related way of describing the structure of life-span development is explicated by sociologists and social psychologists who emphasize cultural and societal expectations confronting individuals during different phases of their life (e.g. Hagestad & Neugarten, 1985; Helson & McCabe, 1994; Neugarten & Datan, 1973; Settersten, 1999). From the perspective of society, individuals are assigned certain roles that are considered appropriate for their position in life, constituting a "social clock" that often varies between men and women. According to this notion, the feminine social clock requires young women to focus on family matters while the masculine social clock proposes that young men concentrate on their career (Helson & McCabe, 1994). However, these social norms are subject to change and differ between successive cohorts (Settersten & Hagestad, 1996; Settersten & Mayer, 1997). Today a great percentage of women follow both the feminine and the masculine social clock as they simultaneously focus on family and career (Agronick & Duncan, 1998). By the same token, family is more salient for today's men (Becker & Moen, 1999). Despite these shifts in expectations concerning the appropriateness of roles held by women and men, it is still clear that society expects individuals in young and middle adulthood to concentrate on work and family matters.

The age-graded and history-graded influences as expressed by developmental tasks and societal expectations are highly intertwined and describe the context within which development takes place. The developing individual, as an active agent of his or her own development, both perceives contextual demands and within this context sets his or her own developmental goals (Brandtstaedter, 1999; Lerner, 2002).

Research conducted with individuals of different ages shows that developmental tasks indeed are reflected within the personal goal system (Hooker, 1999; Hoppmann & Smith, 2004; Markus & Nurius, 1986; Nurmi, 1992; Smith & Freund, 2002). However, which goals are selected out of the pool of all possible family- and work-related objectives and how these goals are related to one another is highly individual-specific. As development is based on a dynamic interplay between individual and culture, life paths can be characterized by an active adaptation. The individual has to learn about the tasks in the surrounding culture and then needs to determine his or her own goals. Hence, each individual has to decide which tasks are to be selected and how to relate the different task domains to each other in order to handle them (Brandtstaedter, 1999; Cantor & Sanderson, 1999; Lerner & Walls, 1999). The question of how personal goals concerning different domains are related to one another becomes even more central if they are potentially conflicting. Due to the fact that most individuals find at least some of their current tasks to be difficult and experience some conflict in effectively

balancing multiple tasks (Cantor et al., 1992; Kossek & Ozeki, 1998), this study will investigate the relationship between work and family goals in the present sample of employed parents.

So far the main focus has been on the individual. However, the management of the multiple tasks associated with specific stages in life is a challenge for both the individual and also for significant others as in almost all endeavors social partners are involved to some extent. Hence, developmental tasks can be characterized as interactive processes for which it is crucial that all persons involved have an integrated view of the task in question (M. M. Baltes & Silverberg, 1994; Meegan & Berg, 2001; Oerter, 1986). According to this notion, it seems important not only to investigate the management of age-related goals at the level of the individual but also to consider how closely-related persons influence each other in their attempt to combine the pursuit of multiple goals. In the next sections I will first elaborate the relationship between family- and work-related goals at the individual level, and return to the issue of interdependence between different actors afterwards.

2.1.3. On the Relationship between Work and Family in Middle Adulthood

In the previous section I have provided the theoretical basis for my assumption that work- and family-related topics play a dominant role in middle adulthood. I will now try to disentangle how these two spheres are related to one another and how these relations come about. In order to do so, I will first present studies that report a negative relationship between work and family and ask about possible reasons for work-family conflict. This will be followed by an introduction of research indicating that work and family can be positively related to one another and by an elaboration of underlying factors.

The spheres of family and work differ with respect to many central characteristics. Following this vein, some authors call them mutually independent (Heinz, 1995; Krueger & Born, 1990). If an individual needs to simultaneously respond to the demands of both work and family, this often results in conflict (Frankenhaeuser, 1994; Williams, Suls, Allinger, Learner, & Wan, 1991). Conflict is especially common if demands are currently high in both spheres, as is the case for the employed parents of this study, who have young children and are still at the beginning of their career.

Conflicts between the domains of work and family can take two forms. Work can interfere with family demands and family can interfere with work demands (Kossek & Ozeki, 1998). Kossek and Ozeki (1998) deduce from their meta-analysis that both family to work and work to family conflict is associated with low life satisfaction.

Historically, the focus of the social sciences on conflict between work and family coincided with the rapid acceleration of women's entry into the paid labor market. Because of the supposed complementarities between men's work and family roles, it was assumed that multiple role occupancy does not trigger conflict for men. In contrast, requirements of women's work and family roles have been assumed to lead almost inevitably to conflict (Barnett, 1998). These a priori assumptions shaped the landscape of research in this field in such a way that almost all studies on work-family conflict are conducted with women. Without reflecting this shortcoming in sample selectivity, many researchers inherently assume that work-family conflict is more pronounced in women than in men. However, research done with dual-earner couples led to inconsistent results. While Frankenhaeuser (1994) finds that women experience more conflict between work and family due to a higher workload off the job, Bolger and colleagues (Bolger, DeLongis, Kessler, & Wethington, 1989) report that men in dual-earner couples are more prone to home-to-work stress contagion than women.

Frone, Yardley and Markel (1997) as well as Greenhaus and Beutell (1985) provide a heuristic model for differentiating antecedents of work-family conflict. Frone and colleagues (1997) investigated three possible antecedents of work-family conflict - namely time scarcity, role-strain and relations with others. As individuals invest a large amount of *time* in either work or family, they presumably do not have enough time left to meet the demands of the other sphere, thus leading to conflict. *Strain*-based conflict arises if characteristics of one sphere produce distress and if that undermines an individual's ability to get engaged with the other sphere. Finally, the above-cited authors investigated the *relation with others* at work as well as in the family context. Assistance and support proved to be factors that decrease work-family conflict. The question of how relations with close others influence the ability to simultaneously respond to work and family matters will be discussed in more detail later. Frone and colleagues (1997) also found that conflict between work and family has a negative impact on role performance. Although the cited authors used role performance as an outcome, this might not be the only way to look at it. The concept proposed by Greenhaus and Beutell (1985) provides a different explanation for the negative relationship between role performance and conflict, which will be elaborated in the next paragraph.

In their meta-analysis on sources of conflict between work- and family- roles, Greenhaus and Beutell (1985) also propose three factors that underlie work-family conflict. In their view, conflict arises if participation in one role is made more difficult by participation in the other role and that conflict is intensified when both work and family are œntral to a person's self-concept. The first type of conflict considered is *time-based conflict*. As time

spent on activities within one role cannot be devoted to activities belonging to the other role, conflict results from a situation where work and family are in competition for a person's time. *Strain-based conflict* exists when stressors in one role produce strain that makes it difficult to get engaged with the other role. An example of this type of conflict is negative mood spill-over (Williams & Alliger, 1994). Finally, *behavior-based conflict* is present if patterns of behavior in one role are incompatible with expectations of behavior in the other role. Hence, if individuals do not manage to adjust their behavior to characteristics of either role, they are likely to experience conflict. Following this line of thinking and considering the proposition made by Frone and colleagues (1997), low role-performance might not only be the result but could also be an antecedent of work-family conflict. Greenhaus and Beutell (1985) suggest that future research, especially if dealing with dual-earner couples, ought to consider the importance of relationship characteristics within the family context and to investigate their influence on individual time, strain, and behavioral pressures within the work and family domains. Following this suggestion I will outline one way of considering this in a later section.

Most research conducted on the relation between work and family focuses on conflict. This seems a to be a major shortcoming because work and family do not have to be in conflict with one another but also bear the potential of being mutually supportive (Greenhaus & Beutell, 1985). A recent research synthesis (Klumb & Lampert, 2004) on women, work, and well-being found that the net effect of women's participation in the labor force was positive, supporting the assumption that multiple roles can enhance well-being. Similarly, Repetti, Matthews, and Waldron (1989) report that on average women's employment does not have a negative effect on their health. Following this vein the question of possible underlying processes arises. One such process might be the one of positive mood spill-over. While several studies investigated the detrimental effects of stress in one role on behavior in the other role caused by a negative spill-over of emotions (e.g. Repetti, 1989; Williams & Alliger, 1994), it is also possible that gratification in one role might spill over to enhance activities within the other role (Grzywacz, Almeida, & McDonald, 2002). Hence, energy gained from the positive experience at work for example might contribute to involvement in family activities. One should therefore also assess if the participation in one domain increases resources such as energy that can then be invested to the other domain.

To conclude, the relationship between work and family in middle adulthood can be both positive as well as negative. Research on work-family conflict is vast. Conflict results from a scarcity of resources such as time and energy and from incompatible behaviors. The

little research focusing on a positive relation between work and family indicates that the enactment of both roles can also expand resources such as energy. Hence, it seems reasonable to investigate both positive as well as negative relations between work and family in the present sample of employed parents and to consider which interindividual differences contribute to success in the endeavor of combining family and work.

2.1.4. Relations Between Work- and Family-Related Goals at the Individual Level

According to the concepts of developmental tasks and the social clock, which together form the developmental context, family and work are assumed to play a dominant role in middle adulthood (Cantor & Sanderson, 1999; Helson & McCabe, 1994; Hooker, Fiese, Jenkins, Morfei, & Schwagler, 1996; Lachman, 2004; Nurmi, 1992). Work and family, as it has been explicated in the previous section, bear the potential for both conflict and enhancement. However, development is not a simple product of environmental circumstances but consists of a dynamic interplay between individual and context (Brandtstaedter, 1999; Lerner & Walls, 1999). Therefore, I will now come back to the concept of personal goals as those individual standards that represent what a person wants to achieve during a specific phase in life and ask which characteristics of personal goal systems are likely to be associated with a more or less successful development.

The model of selective optimization with compensation proposes that people are selective in the setting of their goals because the resources needed for goal pursuit are limited throughout the life-span (Freund & P. B. Baltes, 2000). As people generally pursue multiple goals (Cantor et al., 1992; Hoff & Ewers, 2003), it is an important issue how these goals are interrelated to make the best out of available resources. Sheldon and Kasser (1995) emphasize the positive impact of an integrated goal system on psychological health and well-being. They distinguish two types of functional integration called goal coherence, namely vertical and horizontal goal coherence. Vertical goal coherence exists if lower-level goals are consistent with higher-level goals. That means specifically that success with lower-level goals helps bring about higher-level goals. Horizontal goal coherence occurs when success with a particular goal reinforces success of other goals at the same level of the system (Sheldon & Kasser, 1995). In accordance with the concept of developmental tasks, which does not give priority to any one of the proposed tasks, it is assumed that family- and work-related goals operate at the same systems level. Hence, the focus of this study will be on the horizontal relations between work and family goals within the present sample of employed parents.

Studies investigating horizontal goal relations display inconsistent results. Sheldon and Kasser (1995) explored the relationship between horizontal congruence of students' personal strivings and positive as well as negative affect, self-esteem and motivational energy. Within this study goal congruence turned out to be unrelated to all investigated outcomes. Emmons and King (1988) investigated the influence of horizontal goal conflict on different indicators of psychological functioning in three studies using student samples. In the first study goal conflict was positively related with negative affect, depression, anxiety and physical symptoms. In the second study, however, goal conflict was not associated with negative affect but with measures of physical illness. And in the third study, reports of conflicting goals were positively related with thinking more about and acting less on personal goals. King, Richards and Stemmrich (1998), who also investigated the relationship between goal conflict and well-being in a student sample, found no significant correlation between the degree of goal conflict and measures of life satisfaction, self-esteem and depression. However, in accordance with Emmons and King (1988), goal conflict was associated with less goal progress. Palys and Little (1983) separately investigated both positive as well as negative intergoal relations in two studies using student and community samples. Results of both studies indicate that persons low in life satisfaction reported more goal conflict than persons high in life satisfaction. Unfortunately, no results were presented on the effects of positive goal relations. Taken together, the above-cited literature indicates that goal conflict is somewhat negative. However, results of different studies using similar measures but different samples do not coincide. The only study that actually reports results on positive intergoal relations did not find any significant correlation with the used outcome measures (Sheldon & Kasser, 1995).

This inconsistency in results led Riediger and Freund (2004) to question the current methodology of investigating differences in intergoal relations. The authors suspected that the differing results might be due to an inherent but unreflected assumption that goal interference and facilitation present two opposite poles on the same dimension. Following this vein they separately investigated positive and negative intergoal relations, allowing participants to rate their goals as both interfering and facilitating. The results of this investigation provide evidence that goal interference and facilitation represent two separable dimensions and that these two dimensions have a different function for psychological well-being and goal pursuit. Riediger and Freund (2004) showed across three studies that intergoal interference was negatively associated with psychological well-being whereas intergoal facilitation was positively related with goal pursuit.

Hence, previous research indicates that the relationship among a person's multiple goals has an influence on the developmental success of the individual and that intergoal interference and intergoal facilitation do not represent opposite poles on a single dimension. It therefore seems important to distinguish the effects of positive and negative relations among multiple goals because the underlying mechanisms linking them with different aspects of successful development might not be the same.

2.2.   Interpersonal Contributions to the Pursuit of Work- and Family-Related Goals

In the previous sections I provided evidence that personal goals can promote successful development but also put an individual at risk of experiencing stress. Additionally, it has been shown that work and family goals play a central role in middle adulthood and that the combination of work and family bears the potential for both stress and enhancement. And finally, referring to research on the quality of the relationship among multiple goals at the individual level, it was demonstrated that positive and negative goal relations have an impact on the developmental success of the individual and that the mechanisms linking intergoal interference and intergoal facilitation with specific outcomes differ.

I will now pick up the question of how aspects of the interpersonal context may contribute to the successful pursuit of work- and family-related goals in employed parents. Throughout the life-span development takes place within the context of social networks such as families. Hence, despite the fact that individuals direct their own development through the setting and pursuit of personal goals, successful development also requires a coordination of the developmental perspectives within the family network and a sense of cooperation (Antonucci, 2001; M. M. Baltes & Silverberg, 1994; Schneewind, 2003). Accordingly, development is has been described as being driven by a "dialectic dynamism" (M. M. Baltes & Silverberg, 1994, p.64) between independence and agency on the one hand and dependency and affiliation on the other hand. However, present research does not pay a lot of attention to how closely interrelated individuals set and pursue their goals in relation to their social partners (see Cranach, 1996 for an exception). Consistent with those researchers interested in developmental dynamics from an interactive-minds perspective, this study adopts a theoretical orientation that aims at integrating individual and social aspects involved in the successful management of work and family goals in middle adulthood (P. B. Baltes & Staudinger, 1996; M. M. Baltes & Carstensen, 1998; Smith, 1996).

The following chapter aims at elaborating on two aspects that are concerned with the question of how social partners might contribute to favorable or unfavorable individual outcomes. First, it is assumed that a person's partner is of significance for the ability to balance work and family goals. It is expected that the successful combination of work and family goals in employed parents requires coordinative efforts between both members of the couple. Hence, in an extension of prior research on *intra*individual goal relations (Riediger & Freund, 2004), it will be investigated how the quality of *inter*individual goal relations affects the developmental success of the individual. Additionally, it will be examined how

characteristics of the personal goals each partner brings to the relationship contribute to the quality of interpersonal goal relations.

Research investigating supportive acts between different generations provides evidence that the endeavor to combine work and family in middle adulthood often includes kin beyond the nuclear family and that grandparents play an important role for the care of their grandchildren especially if both parents are employed (e.g. Hank, Kreyenfeld & Spiess, 2004; Herlyn et al., 1998). Hence, as a second aspect it will be considered if access to grandparental support in the form of childcare constitutes a social resource that contributes to the successful pursuit of multiple goals in employed parents.

2.2.1. Factors within the Partnership

Partnerships can be characterized by mutual influences and the coordination of personal developmental perspectives. Nevertheless, this mutuality can comprise both positive aspects such as social support as well as negative aspects such as conflicts and burdens. Hence, partnerships represent an important developmental context providing the individual with specific resources as well as restrictions (Antonucci, Akiyama, & Merline, 2001; Asendorpf & Banse, 2000; Brandtstaedter, Baltes-Goetz, & Heil, 1990; Clark & Reis, 1988; Hoff & Ewers, 2003; Rook, 1998; Schneewind, 2000; Schwarzer & Leppin, 1989). In line with the collective extension of the SOC model, it is assumed that social partners influence goal-relevant means and that work and family goals can be hampered as well as facilitated within different partnership contexts (M. M. Baltes & Carstensen, 1998). In the existing literature little attention has been given to the organization of personal goals in partnership and how it affects the developmental success of the individual. This study attempts to expand existing research by investigating the link between positive as well as negative interpersonal goal relations and the ability to pursue and progress on multiple goals in each member of the couple.

Additionally, it will be considered how different interpersonal goal relations come about. Within the present study special attention is given to characteristics of the personal goals each partner sets in the domains of work and family. This seems important because characteristics of each individual's personal goals are likely to affect not only the individual himself but also have an impact on the respective partner. Because time is a particularly limited resource in young parents who are still in the beginning of their career, special attention will be given to time-related goal characteristics and it will be examined to what extent they might influence the quality of interpersonal goal relations in employed parents.

2.2.1.1. Relations among the Goals of both Partners

Personal goals are often linked between closely interrelated individuals, and it is therefore important to investigate the relations among the goals of individuals in partnerships as they might affect each member's ability to pursue and progress on personal goals. The relations among the multiple goals of two individuals can take several forms. They can be positively related, negatively related or independent of each other (Deutsch, 2000). A positive relation among partners' goals bears the potential for a bundling of efforts and resources and might facilitate goal pursuit at the individual level. Negative interpersonal goal relations in contrast might hamper individual goal pursuit (Deutsch, 2000; Wilensky, 1983). While positive and negative interpersonal goal relations require social interdependence, it is also possible that individuals hold goals that are independent of their partner.

Few situations are purely positive or negative. People generally have multiple goals and it is common that some of their goals are positively and some are negatively interdependent (Deutsch, 2000). For this reason and also based on the assumption that positive and negative interpersonal goal relations might entail different mechanisms, the relative strengths of the two qualities of goal relationships will be considered. For ease of presentation, characteristics of positive interpersonal goal relations, negative interpersonal goal relations, and goal independence will be introduced separately.

2.2.1.1.1. Negative Interpersonal Goal Relations

Negative interpersonal goal relations have been recognized as antecedents of a variety of negative intrapersonal as well as interpersonal consequences. Depending on the topic under investigation they have received quite a few different labels such as conflict, competition, negative interdependence, inhibition, or interference and have not been defined uniformly (Argyle, Furnham, & Graham, 1981; Clegg & Sewell, 2001; Cranach, 1996; Deutsch, 2000; Wilensky, 1983). In the following section I will mainly draw on two lines of research (Deutsch, 2000; Wilensky, 1983) in order to get a deeper understanding of these concepts. The reason for selecting these two authors is that both of their concepts provide an in-depth analysis of the defining features of negative interpersonal goal relations.

Wilensky (1983) uses the term goal competition and defines it by the existence of "mutually opposing goals held by different individuals" (Wilensky, 1983, p. 54). According to his view, goal competition occurs if two persons attempt to pursue states that exclude each other. Wilensky (1983) specifies three different sources of goal competition: First, people's goals are in competition if the plans for the goals of two persons require a common limited

resource. Available time for instance, might not suffice for both partners' goal attainments. Secondly, the goals of two persons may be in competition if they require incompatible states to exist. For example, one parent might want to find a good private school for his child while the respective partner wants to reinforce contacts with children coming from diverse social backgrounds which can better be reached by registering him or her in public school. Or finally, one person's goal-relevant plans may cause the other person to have a preservation goal. For instance, one partner might work on a promotion that requires a move away from the family causing his or her spouse to have the goal to preserve their marriage. Goal competition is insofar destructive as the goals held by two interrelated individuals make each others' goal achievements more difficult (Wilensky, 1983).

Deutsch (2000) also refers to the term goal competition and distinguishes the following two components: (a) a negative interdependence among the goals of two persons per se and (b) a negative relation between actions taken by two individuals to attain their goals. Negative goal interdependence describes a situation "where the goals are linked in such a way that the amount or probability of a person's goal attainment is negatively correlated with the amount or probability of the other's goal attainment" (Deutsch, 2000, p. 22). In other words if one individual manages to attain his or her goal, this implies that the other individual does not attain his or her goal. Hence, this component reassembles Wilensky's (1983) second source of interpersonal goal competition, namely a striving for the existence of mutually exclusive states. According to Deutsch (2000) a negative relation among the actions of two individuals, the second component of goal competition, exists if one person's behavioral acts worsen the other person's chances of attaining his or her goal. Thus, goal competition might be reflected by behavioral hindrances. An example within the context of the present study might be a parent who stays late at the office in order to work on his or her professional development goal, thereby interfering with a planned theatre visit that would have served the respective spouse's partnership goal.

Table 1. *Themes in the Categorization of Negative Interpersonal Goal Relations*

	Wilensky (1983)	Deutsch (2000)
Resource limitation	Limited availability of time and energy	-
Action hindrance	Mutually exclusive states	Negative correlation between two persons' goal attainment
	Causation of preservation goal	Action hindrance

Both described approaches converge in the proposal that negative interpersonal goal relations result from a situation where one individual's goal relevant plans simultaneously hinder or entirely prevent the other individual from attaining his or her goal. However, only Wilensky (1983) stresses the importance of resource limitations for interpersonal goal conflict. Because both of these themes are plausible sources of a negative relationship between two persons' goals, action hindrance as well as resource limitation will be considered as components of negative interpersonal goal relationships. In line with the above described lines of research, it is assumed that employed parents with negative interpersonal goal relations experience greater difficulties in their individual attempts to pursue work and family goals than partners whose goals are not negatively interrelated.

2.2.1.1.2. Positive Interpersonal Goal Relations

As it is the case with negative interpersonal goal relations, positive interpersonal goal relations are not uniformly defined and have been investigated using such diverse terms as goal concord, compatibility, cooperation, facilitation, or instrumentality (Argyle, Furnham, & Graham, 1981; Cranach, 1996; Deutsch, 2000; Reis, 1985; Wilensky, 1983). In an attempt to elaborate different components of positive interpersonal goal relations I will again refer to the works of Deutsch (2000) and Wilensky (1983). These authors provide a comprehensive description of factors characteristic of positive interpersonal goal relations.

Wilensky (1983) describes positive interpersonal goal relations, or to use his own words, goal concord, as a situation where two individuals have similar goals. Indicative of such a positive relation among two persons' goals is that they can pool their resources and abilities in the pursuit of their goals. Hence, they can divide up goal-relevant tasks, thereby extending what could be done alone. The resulting reduction of individual costs increases the chances of attaining personally relevant goals. To give an example: One parent might have the goal of fostering the language skills of his three-year-old son. His spouse might have the goal of reading bedtime stories in the evenings. Hence, if the wife takes the time to read stories, she helps bring about her husband's goal as well.

Deutsch (2000) uses the term cooperation when addressing the characteristics of positive interpersonal goal relations. According to his notion the goals of two individuals are positively interrelated if one person's goal attainment is positively correlated with the other person's goal attainment. Hence, if one individual manages to achieve his or her goal, the other person does so, too or at least experiences a reasonable amount of goal progress. This is illustrated by the following hypothetical situation: Parent A wants to spend more time with his

son. Person B has the goal of spending two evenings per week on a computer-administered course serving her professional development. Hence, if parent A manages to spend several evenings at home with the child, person B will have her course completed within a short period of time. The second component of cooperation relates to the goal-relevant actions of two interrelated persons. Positive interpersonal goal relations are thought to occur if one individual's actions improve the other person's chances of obtaining a goal, thus allowing for effort to be coordinated and labor to be divided (Deutsch, 2000). This aspect is closely related to Wilensky's reasoning about goal concord.

Table 2. *Themes in the Categorization of Positive Interpersonal Goal Relations*

	Wilensky (1983)	Deutsch (2000)
Resource expansion	Pooling of resources	-
Action facilitation	Mutual enhancement of plans	Positive correlation between persons' goal attainment
	Joint plans	Actions of one are also in the service of the other's goals

Both authors point out that the goals of two individuals are positively interrelated if one person's actions simultaneously further the other person's goal attainment as well. Despite the fact that a division of goal-relevant actions is part of Deutsch's concept (Deutsch, 2000) as well, Wilensky (1983) directly explicates its beneficial effect in terms of an expansion of resources. Hence, both aspects – action facilitation and resource expansion – are examined for their contribution to positive interpersonal goal relations. Within the current framework it is expected that employed parents with positive interpersonal goal relations can pool their resources and facilitate each other's actions, thereby optimizing goal pursuit for everyone involved.

2.2.1.1.3. Independence of Personal Goals

In the case of positive or negative interpersonal goal relations, the goals of two persons have to be interrelated with one another. However, goals do not have to be interdependent. Goals are independent if there is no correlation between people's goal attainment and / or if goal pursuit is not affected by the behavior of other people. Hence, if the goals of two persons are independent they can be reached regardless of other peoples' goal achievements. Additionally, goal independence exists if other persons' actions neither help nor hinder own goals (Deutsch, 2000). Within the context of the present study it is assumed

that independence among the goals of two partners leaves individual opportunities for personal goal pursuit unaffected.

2.2.1.2. Antecedents of Positive and Negative Interpersonal Goal Relations

While the previous chapter was concerned with the structure of interpersonal goal systems and how it affects personal goal pursuit, the aim of the following section is to introduce possible factors underlying conflict and convergence in interpersonal goal relations. Therein, special attention is given to individual goal characteristics in husbands and wives and how they relate to positive as well as negative relationships among partners' goals.

The model of selective optimization with compensation (M. M. Baltes & P. B. Baltes, 1990; P. B. Baltes, 1997; Freund & P. B. Baltes, 2000) states that people ought to be selective in the setting of their goals because resources are limited during each period of the life-span. Selection means a narrowing down of personal goals from the pool of individual options to fit developmental circumstances. A selection of resource-adequate goals serves successful development because focusing on a select set of personal goals makes the best out of available resources (Freund & P. B. Baltes, 2000).

Research based on the time-budgets of different age-groups shows that time is a particularly limited resource in parents with small children who are still in the beginning of their career (Bittman & Wajcman, 2000). Hence, according to the present sample of employed parents with preschool children, the focus of this study will be on the time-related characteristics of the goals husbands and wives set in the domains of work and family.

In line with the literature on personal goals and research on the division of labor in dual-earner couples, I will draw on quantitative as well as qualitative time-related goal characteristics. Corresponding to Little's (1983) call for a consideration of the effect of the time-intensity of personal goals on an individual's social ecology, the first aspect that is examined for its influence on the quality of interpersonal goal relations is the amount of time necessary for the successful pursuit of work and family goals. It is assumed that partners whose goals are very time-consuming compete for their limited resources and will thus see their goals to be more negatively interrelated as compared to partners who select goals that are less time-intensive.

The second aspect that is considered for its contribution to the quality of interpersonal goal relations is the temporal flexibility of personal goals. This concept is adopted from research on the division of household labor (Barnett & Shen, 1997) and reflects the fact that it might not only be important to investigate how much time is needed for a certain task but also

when it can be fulfilled. Tasks low in temporal flexibility, are those that are fixed to certain time-points whereas tasks high in temporal flexibility can be done on various occasions (Barnett & Shen, 1997). Within the context of the present study a low temporal flexibility goal might be the participation in a rhetoric seminar that requires regular attendance on specific evenings. An example of a high temporal flexibility goal could be familiarizing oneself with a new software package which can be done almost any time. It is assumed that partners who hold goals that are bound to certain time-points might hinder each other in the pursuit of their goals and will therefore report more interpersonal goal conflict than partners whose goals are high in temporal flexibility.

2.2.2. Grandparental Support in the Form of Childcare

So far the focus has been on factors influencing the successful combination of work and family goals within the partnership. This is in line with current research on the balance between work and family. In the next section I will broaden the scope of this investigation beyond the nuclear family by addressing the question to what extent members of the extended family network such as grandparents may contribute to the successful pursuit of work and family goals in employed parents. Therein, particular emphasis will be given to supportive acts in the form of childcare and it will be examined whether access to grandparental childcare might provide employed parents with an important back-up system, thus facilitating the pursuit of multiple goals.

Two lines of research suggest that grandparental contributions to the pursuit of multiple goals in adult children might be a promising arena for further investigations. First, research by Ryff and colleagues (Ryff et al., 1994) underlines the centrality of adult children's attainments and achievements for the well-being of their parents. By investigating a sample of midlife parents with children between the ages of 21 and 44, Ryff and colleagues (Ryff et al., 1994) provide evidence that even when children have grown into adulthood, parents have many hopes concerning the happiness, career success, and family of their adult offspring. Additionally, it could be shown that parental perceptions of adult children's educational success and occupational attainments were positively related to various indicators of well-being in both midlife mothers and fathers. These findings suggest that there is a strong link between parents' views of adult children's successful development and the evaluation of their own lives. Hence, within the context of the present study it is assumed that grandparents feel connected with how their adult children manage to combine their work and family goals.

Secondly, research on social support and social relations shows that family members play an important role in the provision of support and that social support enables the individual to meet life's challenges. Besides the fact that the embeddedness in a supportive family network seems to have a net positive effect per se, access to specific social resources that match individual needs at a given point in time have proven to be a powerful tool in that they buffer stress and contribute to health and well-being (Antonucci, Akiyama, & Merline, 2001; Cohen & Wills, 1985; Schwarzer & Leppin, 1989). Following propositions by Carstensen (1993) the present study considers how older family members can contribute to the developmental success of their adult offspring by providing childcare to small grandchildren.

Studies on intergenerational relations provide evidence for a downward flow of various kinds of support within families and that a substantial proportion of grandparents indicate providing frequent help to their children by taking care of small grandchildren (e.g. German ministry of family, senior citizens, women, and youth, 2001; Herlyn, et al., 1998; Mayr- Kleffel, 1991; Kohli, 1994). Borchers and Miera (1993) for instance report that in a representative West-German sample 47 percent of participants above the age of 40 indicated having taken care of the small children of a relative within the prior two to three years. In another sample representative of the cities of Hildesheim and Hannover, 28 percent of adults aged 40 and above reported having provided childcare to their grandchildren without any specification of a time frame (Borchers & Miera, 1993). Kuhnt and Speil (1986) investigated the time grandparents spend with their grandchildren in a sample of 619 families in Lower Saxony. They found that grandparents spent an average of one hour a day with their grandchildren if the mother was a homemaker. This time increased to four hours per day if both parents participated in the labor force. Templeton and Bauereiss (1994) show that in their sample of 479 West-German families 62 percent of the grandparent generation indicated having been engaged in the care of grandchildren in the past. 16 percent of grandmothers provided childcare on a regular basis and 31 percent sometimes as opposed to 4 percent of grandfathers who regularly took care of their grandchildren and 11 percent who did so sometimes. The closer grandparents lived to their grandchildren the more they participated in childcare. Herlyn and colleagues (1998) investigated a sample of 573 grandmothers, which is representative for the German grandmother population. They report that 20 percent of the grandmothers of their sample had daily contact with at least one grandchild and an additional 25 percent saw grandchildren several times a week. The smaller the living distance and the younger grandmothers and grandchildren were of age, the more frequent their contact. The

amount of time grandmothers spent taking care of grandchildren differed neither by socioeconomic status nor by employment status. Among those living in the same town with young grandchildren, 50 percent provided childcare on a daily basis. 21 percent of the grandmothers whose grandchildren lived far away had contact with them during vacation.

The above-presented results that are based on reports concerning childcare provision from the older generation match findings from studies asking members of the younger generation about grandparental contributions in the form childcare. Alt (1994) reports that in his sample of 1323 adults aged 18 to 32 years, 32 percent indicate having received help from grandparents with respect to childcare in the past. In a study by the German Institute of Population Research (1987) based on 2101 married couples, 21 percent of the mothers indicated that grandparents often or regularly take care of grandchildren and 40 percent said that grandparents generally take care of grandchildren if they are ill or out of town. Köcher (1988) draws on data from Baden-Württemberg and reports that 36 percent of parents with young children reported that grandparents take over childcare if they are at work and 60 percent said that grandparents jump in if they are ill. Data published by the German ministry of family, senior citizens, women, and youth (Fifth family report, 1995) from Baden-Württemberg show that 32 percent of the children of working mothers are cared for by grandparents. Mayr-Kleffel (1991) refers to data from a sample of 1446 German women high in socioeconomic status. 35 percent of those mothers who were employed 20 or more hours per week received help in childcare on side of a grandparent. The support working mothers received from grandmothers with respect to childcare even turned out to greater than the average contributions by their partners. What can be concluded from the above-cited literature is that a substantial proportion of parents with young children in Germany have access to grandparental support in the form of childcare, especially under special circumstances. One important aspect of grandparental childcare within the context of the present study is the fact that unlike public childcare, grandparents also look after children on weekends, during times of illness of a child, or when parents need to leave town due to work travel. Hence, grandparental childcare might extend not only the amount of time that employed parents have available for market work but also foster the plans they have concerning work.

To conclude, the presented lines of research provide evidence that grandparents care a lot about their adult children's attainments and that a substantial proportion of German parents can rely on grandparental support in the form of childcare. Because grandparental childcare is thought to represent a very reliable back-up system extending not only the available time for employment but particularly promoting the enactment of planned actions, it is expected to

serve as an important social resource in the combination of work and family in working parents with small children and is therefore expected to facilitate the pursuit of multiple goals in the present sample.

Additionally, social support provided by grandparents is assumed to be all the more important if partners are having difficulties in coordinating their work and family goals within their partnership. Hence, grandparental childcare might be particularly helpful in the presence of interpersonal goal conflict. Extending this line of thinking, it is expected that grandparental support buffers the proposed negative effect of conflict in interpersonal goal relations and can serve as a compensatory mean for the successful management of work and family goals within the present sample.

2.2.3. Excursus: Investigating Mutual Influences in Social Relationships: The Actor-Partner-Interdependence Model

One defining feature of research on social-interactive development is that several persons are involved. Despite the fact that this is a truism, which per se points to the importance of considering the perspectives of more than one person, much research on relationship phenomena is based on samples of unrelated individuals rather than investigating couples or families. This study aims at overcoming this shortcoming by including both partners of the couple in the present investigation on interpersonal contributions to the pursuit of work and family goals in middle adulthood.

Research on social relationships has to consider that data from closely interrelated individuals such as married partners are non-independent in nature, which means that the partners of a couple can be both more similar or more dissimilar to one another as compared to other individuals who do not belong to this partnership. Kenny and colleagues (Kenny, Mannetti, Pierro, Livi, & Kashy, 2002) point to three different sources of non-independence: First, compositional effects result from the fact that marriage partners often are similar on different characteristics (e.g. age, education, social resources), even before they meet. Second, common fate leads to non-independence because partners coexist in the same environment. Third, and most importantly, mutual influences reflect the fact that partners' thoughts and behaviors may either directly or indirectly affect the other person in a non-random way.

The Actor-Partner-Interdependence Model (APIM; Kashy & Kenny, 2000; Kenny & Cook, 1999) was developed to account for such complex patterns of variability for individuals in partnerships. A sketch of this model is depicted in Figure 1. The assumption

underlying this model is that an individual's personal characteristics might affect not only his or her own behavior (actor effect) but also that of the respective partner (partner effect) and that both partners' personal characteristics and both partners' behaviors can influence each other (mutual influences).
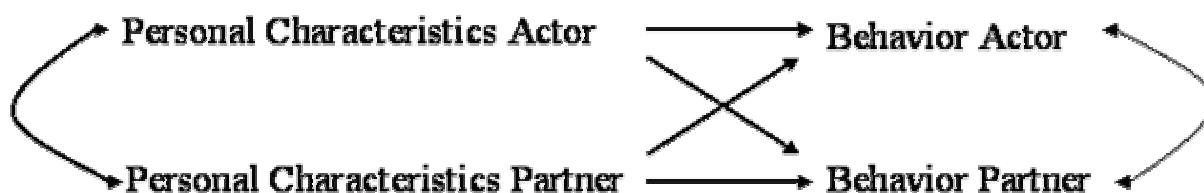

Figure 1. *Actor-partner-interdependence model (modified after Kenny & Cook, 1999)*

Hence, within the context of the present study it is important to consider the characteristics each partner brings to the relationship such as his or her own work and family goals (1), how these goals are interrelated between husbands and wives (2), whether the quality of interpersonal goal relations influences own behavior, such as goal pursuit, as well as that of the respective partner (3), and how shared couple-characteristics, like access to grandparental childcare, affect the behavior of both husband and wife (4).

2.3. Possible Consequences of Differences in Interpersonal Contributions to the Pursuit of Work- and Family-Related Goals in Employed Parents

While the past section was devoted to an introduction of the central concepts for the present investigation on interpersonal contributions to the pursuit of work and family goals in employed parents with preschool children, the following sections will shed light on possible consequences of conflict and convergence in interpersonal goal relations and access to grandparental childcare. An investigation of developmental consequences requires a theory-based consideration of the following two important methodological questions: First, one has to select adequate criteria that are likely to reflect intra- and interindividual differences in developmental success. And second, one needs to specify an adequate time-frame in order capture the processes linking predictors and criteria.

I will start by addressing the question concerning the selection of adequate indicators of developmental success. Successful development has been defined as the maximization of gains and the minimization of losses (P. B. Baltes et al., 1998). Within this very broad definition no standard set of criteria exists that could be used for an evaluation of developmental success. Nevertheless, researchers agree that it should be investigated using multiple criteria (M. M. Baltes & Carstensen, 1996; P. B. Baltes et al., 1998; Frankenhaeuser, 1994; Schwarz & Strack, 1999). In accordance with this notion, this study will draw upon behavioral, experiential as well as physiological indicators of successful development. Within the present study, goal pursuit and goal progress will be used as behavioral indicators, subjective well-being will be investigated as an experiential criterion, and different levels of free cortisol in saliva will serve as a physiological measure of developmental success.

The second question addresses the choice of an adequate time-frame for the investigation of developmental outcomes. A selection of the right time-frame that is likely to capture the different processes leading to different levels of developmental success inherently depends on characteristics of the phenomenon under investigation (Zapf, Dormann, & Frese, 1996). Because the main focus of the present study is on the successful combination of work and family goals in employed parents, two aspects are of primary interest: First, how the quality of interpersonal goal relations and access to grandparental childcare influence the everyday processes that are associated with the pursuit of work and family goals and how an engagement in goal pursuit affects subjective mood and physiological arousal. And second, the extent to which conflict and convergence in interpersonal goal relations are linked to the degree of progress on work and family goals and how progress on personal goals is related to subjective well-being. For the purpose of the present study I have chosen to investigate the

personal goals employed parents set and pursue at a fairly concrete level in order to be able to examine the dynamic interaction between person and context that is involved in people's everyday actions and behavior (Emmons, 1989; Hooker, 2002).

In order to capture both everyday processes as well as higher-level outcomes, the different indicators of developmental success are investigated at different levels of abstraction. According to the interest of this study and in line with a call from the side of life-span scholars, it seemed sensible to implement a short-term longitudinal design including bursts of measurements (Nesselroade & Ghisletta, 2003). Through the combination of a microanalysis of daily life using time-sampling methods with a questionnaire-based assessment of long-term consequences, the present study examines processes at different levels of abstraction.

Based on the above-presented lines of thinking, the present investigation relates conflict and convergence in interpersonal goal relations as well as access to grandparental childcare to behavioral, experiential, and physiological indicators of successful development at different levels of abstraction. In the following sections I will first introduce theories linking the main predictors with micro-analytic processes of developmental success and then turn to a description of the expected macro-level outcomes.

2.3.1. Micro Analytic Level: Patterns of Developmental Success as Indicated by Behavioral, Experiential, and Physiological Indicators

A micro analytic approach to successful development directs the focus to an investigation of goal-relevant processes in everyday life. It is not enough to ask which goals people set for themselves and how these goals are related to significant others. In addition to that focus, one needs to consider whether individuals actually manage to work on their goals and how this is related to subjective and physiological indicators of well-being. I will therefore pick up the considerations about processes of self-regulation which have been introduced in an earlier section (see section 2.1.1.) and describe the mechanisms that address the link between conflict and convergence in interpersonal goal relations, support in the form of childcare on side of grandparents, and carried-out actions in everyday life. In addition, it will be investigated how different activities during the course of a day are related to an individual's mood quality. And finally, it will be examined whether or not this is associated with the physiological arousal level as indicated by salivary cortisol. For ease of presentation the respective outcomes will be introduced in separate sections even though they might be intertwined.

2.3.1.1. Behavioral indicators

Due to the fact that the existence of specific goals does not guarantee the enactment of intended actions (Ajzen, 1985), the aim of this section is to examine the impact of the quality of interpersonal goal relations - interpersonal goal conflict and convergence - on actions taken in everyday life. Additionally, it will be examined how one key social resource, namely grandparental childcare provision, might operate to facilitate the pursuit of work- and family-related goals in employed parents.

This will be done by referring to self-regulatory models in order to explicate the underlying mechanisms. Currently, most models of self-regulation mainly focus on the relationship between goals and behavior at the individual level (Brandtstaedter & Rothermund, 2002; Carver & Scheier, 2002; Gollwitzer & Moskowitz, 1996; H. Heckhausen, 1991; J. Heckhausen, 1999). Only recently, researchers have started to criticize this confinement to individual agency and have addressed the specifics of individual goal pursuit within different social contexts. Cantor and Blanton (1996) for instance emphasize that an investigation of everyday goal pursuit should go beyond an examination of temporal and situational characteristics by considering the interpersonal specifics of individual behaviors as well, especially when the interest is in obstacles to personal goal pursuit. The authors therefore suggest to complement the "when" and "where" of goal-relevant actions by a "with whom" in order to capture the interpersonal impediments to individual goal pursuit (Cantor & Blanton, 1996).

Bandura (2001) stresses that personal agency is rooted within a system of social influences which can provide the individual with resources as well as constraints. He especially points to two things: First, the benefits of coordinating personal incentives with significant others in order to secure what cannot be accomplished alone. And second, that it is advantageous to be in contact with a network which can provide resources that are central to desired outcomes because no one has the resources to master every realm of everyday life alone (Bandura, 2001).

Proactive coping theories (Aspinwall & Taylor, 1997; Schwarzer, 2000; Schwarzer & Taubert, 2002) point to the importance of an acquisition and accumulation of resources that precede anticipated challenges and threats in order to assure successful goal management. These efforts include the establishment of a social support network which provides the individual with those kinds of support that are needed for personal goal attainment. Hence, on a theoretical basis it has been recognized that individual goal pursuit is likely to be influenced

by the behavior of close others and that people benefit from having access to external resources provided by members of their social network.

Based on these considerations I will now elaborate two of the models of individual self-regulation that have been introduced earlier (see section 2.1.1.), followed by a description of those aspects that are likely to be subject to influences by other co-acting persons. Therein, special emphasis will be given to resource- and behavior-based influences from social network partners and how they affect individual goal pursuit.

The first model I will refer to is the control process model of behavior by Carver and Scheier (1982; 2002). According to this conceptualization, goal-directed behavior is based on a negative feedback-loop that involves four steps. First, information about the current status is assessed. Then this information is compared to a reference value or goal leading to one of two possible outcomes: either discrepancy between current condition and goal or accordance. If this comparison results in "accordance," behavior is continued, if it yields "discrepancy," behavior is changed in order to bring it into line with personal goals. This behavioral adjustment of personal goal pursuit serves countering deviations introduced by the environment such as external disturbances. Finally, the new status is determined and the cycle starts again. Together these processes serve a discrepancy-reducing function and people are expected to exit the described loop upon goal achievement (Carver & Scheier, 2002).

Despite the fact that the concept of discrepancy reducing feedback-loops was developed to model individual behavior, self-regulation on the part of individuals in groups is thought to follow the same principals as individual self-regulation. According to Carver and Scheier (1982) closely interrelated individuals influence their behavior in non-random ways by mutually guiding each other's actions. Under the assumption that each person brings his or her own goals to the interaction, each person may use the behavior of the other as a guide in choosing adequate responses while still attempting to follow his or her individually set goal. Even though Carver and Scheier (1982) do not provide a detailed description of a model underlying socially interdependent self-regulation, they seem to imply a straightforward extension of individual-level feedback-loops in the following way: if there are two persons, one has to consider two separate feedback-loops, each one being guided by the goals of a particular person. These feedback-loops are insofar interconnected as the behavior of one person influences the behavioral options of the other person (Carver & Scheier, 1982). Hence, one person's actions can provide disturbances and obstacles for the other person's attempts to move towards his or her own goals or he or she can extend the behavioral options of the other person, thereby fostering his or her goal pursuit. Despite its social extension, the main idea of

this model is that self-regulation has to be investigated at the individual level but that close others might execute behavioral strategies that provide the individual with an environment that can enhance or hinder behavioral goal pursuit options.

Linking this idea to the quality of interpersonal goal relations, it can be assumed that interpersonal goal conflict and convergence influence goal-relevant means. It is assumed that interpersonal goal conflict might constitute a situation where the two feedback-loops of husband and wife do not work in accordance with each other and that partners with high interpersonal goal conflict might face many obstacles and experience set-backs when they work on their work and family goals in everyday life. Hence, it is expected that employed parents with high interpersonal goal conflict should not only be involved in fewer activities furthering their goals but also report more activities hindering their goals than partners with low interpersonal goal conflict. Accordingly, it is proposed that high conflict between both partners' goals is negatively associated with the goal-relevance of everyday activities. Additionally, it is expected that partners with high interpersonal goal conflict experience many ups and downs when trying to work on their goals. Hence, it is proposed that employed parents with high interpersonal goal conflict report a rapid flow between activities furthering their goals and activities hindering them, leading to a high variability in goal pursuit. Interpersonal goal convergence, in contrast, is thought to allow for a coordinated goal pursuit between the partners which should enhance the behavioral options for everyone involved. It is therefore assumed that partners with high interpersonal goal convergence report a higher goal-relevance of everyday activities than partners with low interpersonal goal convergence.

I will now turn to the second model of self-regulation, namely the model of action phases (Gollwitzer & Moskowitz, 1996; H. Heckhausen, 1991). This model specifies four different action phases characterized by qualitatively distinct tasks that have to be completed to promote goal attainment. The first one is the predecisional phase, during which wishes have to be translated into binding goals. Following this, the individual enters the preactional phase where a plan for goal-directed actions is made. The purpose of the actional phase then is to bring goal-directed actions to successful completion, and during the postactional phase, performance outcomes are evaluated by comparing them with the initial goals (Gollwitzer & Moskowitz, 1996; H. Heckhausen, 1991). Within this model the present study is mainly concerned with the transition from the preactional to the actional phase. Given that a person has a binding goal, he or she needs to identify adequate situational circumstances that ft personal goal pursuit and jump on all opportunities that allow progress towards individual goals. Additionally, the individual has to circumvent difficulties and compensate for failures.

While this model is mainly concerned with a description of the steps that need to be taken in the service of goal attainment, it inherently draws on the assumption that people have the necessary resources. Hence, it might be important not only to investigate if an individual takes advantage of all possibilities for goal pursuit but also to look at individual differences in the availability of such opportunities. Similarly, when talking about the compensation for failures, it might be important to keep in mind that some persons might have more access to compensatory means than others.

Because one constitutional component of interpersonal goal conflict is the limitation of available resources (Wilensky, 1983), it can be assumed that partners whose goals are in conflict with one another have a restricted range of possibilities for personal goal pursuit. Hence, it is assumed that employed parents with high interpersonal goal conflict experience greater difficulties in the identification of situations that fit individual goal pursuit than partners with low interpersonal goal conflict. Accordingly, the former are expected to perform fewer goal-relevant activities than the latter. Interpersonal goal convergence in contrast has been defined by a pooling of resources at the level of the couple and should therefore increase the availability of circumstances that favor personal goal pursuit. It therefore is proposed that partners with high interpersonal goal convergence report more goal-relevant activities than partners with low interpersonal goal convergence.

Given that interpersonal goal conflict is expected to be negatively associated with everyday goal pursuit in employed parents, the question of available means to compensate for action difficulties becomes important. Within the framework of the present study it is assumed that grandparental childcare provision constitutes a key resource extending the time employed parents have for personal goal pursuit and fostering the enactment of planned actions. Therefore, grandparental childcare should be positively associated with the engagement in goal-relevant actions. This external resource should be particularly important under conditions of severe resource constraints. Hence, it will be examined whether employed parents with highly conflicting goals benefit more from having access to grandparental childcare than partners with little or no conflict among their personal goals.

To sum up, the above presented models of self-regulation that were originally designed to describe goal pursuit at the individual level are a useful tool to identify aspects where social partners play a role. In line with these models it is assumed that interpersonal goal conflict, which is defined by incompatible behaviors and resource limitations at the level of the couple, is associated with a reduced goal-relevance of everyday activities and with increased goal pursuit variability, because partners with high interpersonal goal conflict are

assumed to experience more set-backs and activities hindering their personal goals as compared to parents with low interpersonal goal conflict. Interpersonal goal convergence is thought to facilitate the engagement in everyday goal pursuit and should be positively associated with the goal-relevance of everyday activities. Additionally, it is assumed that grandparental childcare constitutes a key social resource for the pursuit of multiple goals in working parents and provides partners with conflicting goals with compensatory means that foster the pursuit of their multiple goals.

2.3.1.2. Experiential Indicators

Several studies provide evidence for the fact that goal pursuit and affect quality are linked with each other (e.g. Emmons & King, 1988). In the following section I will examine the underlying mechanisms by introducing models that elaborate on the relationship between motivation and emotion. I will start with an introduction of factors contributing to negative affect and then turn to an investigation of the relationship between goal pursuit and both positive as well as negative affect.

There are at least two reasons to expect that an inability to engage in goal-relevant actions would be associated with negative affect. According to Kuhl's personality-systems-interaction-theory (2001) a behavioral inhibition of goal-directed actions can lead to extensive periods of ruminative thinking about personal goals. This perseveration of thoughts is an aversive experience, which is thought to promote the experience of negative affect (Kuhl, 2001). Hence, individuals who want to but cannot work on their goals might experience negative affect due to rumination.

Another concept drawing on the link between behavior and feeling has been developed by Carver and Scheier (2000). The authors propose an affect regulating feedback-loop that operates parallel to the behavior guiding one. The input for the affect-creating loop is the perception of the rate of discrepancy reduction in the action-regulation system. Perceptions of successful goal pursuit lead to positive affect. Negative affect arises if an individual moves too slowly toward his or her goals. Quality of affect then feeds back to the behavior regulating system. Positive affect leads to decreased effort, negative affect can lead to increased effort if the individual is confident of eventual success (Carver & Scheier, 2000). According to this notion it is assumed that individuals who are able to perform many activities furthering their goals should experience high levels of positive affect whereas individuals who are only rarely able to engage in activities that further their goals or even find themselves performing activities that hinder their goals experience high levels of negative affect.

Linking these considerations to the propositions about goal-relevant actions from the previous section, it is assumed that interpersonal goal conflict can hinder the engagement in goal-relevant actions which should be accompanied by experiences of high negative affect. Interpersonal goal convergence in contrast should facilitate everyday goal pursuit leading to high levels of positive affect.

2.3.1.3. Physiological Indicators

The preceding chapter provided evidence for a close connection between goal-relevant actions and affective experiences in daily life. The aim of the next section is to show that the goal-relevance of daily activities might not only be associated with specific affect qualities but also affects bodily indicators of health status. Present research provides ample evidence for a close connection between daily behavior and events on one hand and immunological, cardiovascular, and endocrine functioning on the other hand (Hawkley & Cacioppo, 2004; Kiecolt-Glaser & Newton, 2001). Based on these observations the present study aims at examining one specific mechanism by investigating the interface between daily goal pursuit and physiological arousal as indicated by salivary cortisol (Kirschbaum & Hellhammer, 2000). In order to explicate this relationship I will proceed as follows: First, by introducing the biopsychosocial model of stress by Frankenhaeuser (1991; 1994) it will be elaborated why an engagement in activities hindering personal goals should not only be associated with negative affect but also lead to physiological stress responses. Then, I will turn to a brief description of the role of the hypothalamus-pituitary-adrenal (HPA) axis in the response to stress and disentangle adaptive from non-adaptive stress responses. And finally, empirical evidence from both laboratory and field studies is given to support the assumption that psychological stress appraisals are closely related with physiological stress responses.

The biopsychosocial model of stress (Frankenhaeuser, 1991; 1994) is based on the cognitive theory of psychological stress by Lazarus (1991) which has already been introduced in an earlier section (see section 2.1.1.). Like Lazarus (1991), Frankenhaeuser (1994) emphasizes the role of individual characteristics such as personal goals in the cognitive appraisal of an encounter. Personal goals are proposed to specify the personal significance of a particular situation and define whether it is evaluated as being threatening or challenging (Lazarus, 1991; Frankenhaeuser, 1991). Threat appraisals are thought not only to evoke negative emotions but also to trigger physiological stress reactions (Frankenhaeuser, 1991; Lazarus, 1993).

In order to describe individual differences in neuroendocrine stress reactions, Frankenhaeuser (1991; 1994) distinguishes between an activity and an affective dimension of the stress experience. According to her model, the secretion of stress hormones such as cortisol varies depending on whether a specific situation involves an active or a passive state, and whether it is characterized by positive or negative mood. The combination of active – passive with positive – negative states leads to four separable types of situations: *Activity paired with positive affect* is a productive state where a person performs demanding tasks he or she is deeply involved in and is proposed to be accompanied by low cortisol secretion. *Activity paired with negative affect,* in contrast, is specific to situations where an individual performs undesired actions evoking an increase in cortisol secretion. *Passivity paired with positive affect* implies a state where both mind and body are at rest and cortisol secretion is low. And finally, *passivity paired with negative affect* is characteristic of situations where the individual wants to but cannot engage in desired activities. Such involuntary inactivity is thought to lead to an outflow of cortisol (Frankenhaeuser, 1991; 1994; Frankenhaeuser & Johansson, 1986). Hence, in linking these rather broad descriptions to the specific focus of the present study, it can be assumed that situations that are characterized by an active involvement in pursuits furthering personal goals should be related to low cortisol secretion. Involuntary behavioral inhibition and a performance of activities hindering personal goals, in contrast, should give rise to high cortisol secretion. After having introduced stress theories that draw on cognitive appraisal processes in order to address individual differences in endocrine stress responses, I will now turn to a brief description of the role of the hypothalamus-pituitary-adrenal (HPA) axis in the secretion of cortisol, which will be followed by a differentiation of adaptive from non-adaptive stress responses.

The HPA axis responds rapidly and quite specifically to a wide range of internal and external demands. Following stimulation from the brain, corticoliberin is released from the hypothalamus leading to a secretion of corticotropin from the pituitary. Corticotropin stimulates the synthesis of cortisol, which is then secreted from the adrenal glands and released into the blood. Part of the released cortisol is then bound to different carriers and part of it remains "free" in the blood. Simultaneously, feedback is given to hypothalamus and pituitary in order to regulate cortisol synthesis. Only the "free" cortisol is assumed to bring about the multitude of effects in peripheral tissues and the brain. Hence, measurements of free cortisol, which can also be done reliably using saliva samples, gives an estimation of the biologically active fraction. The cortisol response lags by 5 to 20 minutes and reaches its

maximum 10 to 30 minutes after stimulation. Then cortisol slowly returns to baseline levels (Karlson, Doenecke, & Koolman, 1994; Kirschbaum & Hellhammer, 2000; McEwen, 1998).

An acute stress-induced cortisol secretion is insofar adaptive as it mobilizes the energy necessary to meet the demands of current circumstances (McEwen & Seeman, 1999). However, if individuals are repeatedly confronted with stressful events over an extended period of time, they might not be able to efficiently downregulate their physiological arousal after the occurrence of an acute stressor leading to a persistent activation. According to the concept of allostatic load (McEwen & Seeman, 1999) continuous elevation of cortisol comprises a risk factor for the development of mental and physical illness in the long run. Hence, it is important to distinguish between acute stress responses that help the individual to cope with current demands at a specific point in time from chronic changes in the cortisol cycle that might trigger negative secondary effects because the latter have been found to co-occur with a variety of physical and mental illnesses such as burnout, depression or cardiovascular disease (Deuschle, Schweiger, Weber, Gotthardt, Korner, Schmider, Stanhardt, Lammers, & Heuser, 1997; Donnelly, Seth, Clayton, Phillips, Cuthbert, Prescott, 1995; Pruessner, Hellhammer, & Kirschbaum, 1999; Seeman, McEwen, Singer, Albert, Rowe, 1997; Steptoe, Kunz-Ebrecht, Owen, Feldman, Willemsen, Kirschbaum, & Marmot, 2003). Following these lines of thinking, it seems important to distinguish between acute and chronic stress responses when investigating the relationship between daily goal pursuit and cortisol secretion in the present sample. Hence, endocrine stress responses are examined at two levels of abstraction. With respect to the acute stress responses in the employed parents of this study, it is expected that the level of salivary cortisol varies on a moment-to-moment basis depending on the goal-relevance of daily activities. Regarding the more chronic stress responses it is assumed that partners who continuously encounter difficulties in the pursuit of their goals will display an increased overall secretion of cortisol.

In the next paragraphs I will turn to laboratory as well as field studies that provide evidence for the assumed relationship between psychological stress appraisals and the activation of the HPA axis. Research using the Trier Social Stress Test (Kirschbaum, Pirke, & Hellhammer, 1994) shows that the anticipation of a public speech and a mental arithmetic task is perceived as stressful and induces significant increases in cortisol secretion (e.g. Kirschbaum, Klauer, Filipp, & Hellhammer, 1995, Kudielka, Buske-Kirschbaum, Hellhammer, & Kirschbaum, 2004). One specific feature of studies using this paradigm is that study participants learn about the tasks before they have to complete them without being able

to work on them during a 10‑minute anticipation phase. Hence, the anticipation of a stressor combined with an inability to work on it has been shown to elicit activations on the HPA axis.

Research conducted outside the laboratory shows that daily stressors are associated both with negative affect as well as increased cortisol levels (Smyth, Ockenfels, Kirschbaum, Hellhammer, & Stone, 1998). Based on the observation that not only the appraisal of a specific situation but also the emotional tone of daily experiences seems to play an important role for the activation of the HPA-axis, Nejtek (2002) investigated emotional factors underlying the stress‑induced cortisol release and went back to the laboratory. Using films that differed in their emotional contents, the author provides evidence that highly emotional stressors are positively associated with elevations in cortisol whereas low emotion stressors lead to no increase in cortisol release. Hence, it seems to be the case that the HPA axis responds specifically to emotionally‑laden stressors as opposed to neutral stimuli. To my knowledge no study has investigated the link between the goal‑relevance of daily activities and physiological stress responses so far. However, the presented studies show that cognitive stress appraisals which inherently refer to an individual's personal goals are related to an activation of the HPA-axis.

Taken together, the presented lines of research provide evidence for a close relationship between the goal‑relevance of daily activities and physiological stress responses. Based on theoretical considerations and empirical findings, it is therefore assumed that employed parents who manage to work on their goals show low levels of cortisol. Individuals whose goal‑relevant actions are blocked or who engage in activities hindering their personal goals, in contrast, are expected to display an increased cortisol secretion.

2.3.2. Macro Analytic Level: Patterns of Developmental Success as Indicated by Behavioral and Experiential Indicators

Following a description of the proposed consequences of conflict and convergence in interpersonal goal relations and access to grandparental childcare in everyday life, I will now expand the time frame and focus on indicators of developmental success at a more general level. Hence, the following sections are concerned with processes that operate at a much higher level of abstraction. Specifically, it will be asked how conflict and convergence in interpersonal goal relations at the level of the couple are related to the extent to which each partner progresses on his or her work and family goals in the long run. In addition to that, it will be investigated whether the degree of overall progress on personal goals is reflected by

different levels of subjective well-being in the present sample of employed parents with preschool children.

2.3.2.1. Behavioral Indicators

While the section on the relationship between social contributions to the pursuit of personal goals in employed parents was concerned with the mechanisms that operate in everyday life, I will now turn to a description of more global processes that link conflict and convergence in interpersonal goal relations with higher-level outcomes. In doing so, I will refer to goal progress as a behavioral indicator of successful development.

Research by Brunstein and colleagues (Brunstein et al., 1996) points to the importance of considering a partner's supportive versus undermining actions for the enactment of personal goals. The authors investigated if differences in the perception of goal support on side of a romantic partner are related to goal accomplishments four weeks later. Goal support from a partner was operationalized by the provision of favorable opportunities for personal goal pursuit, responsiveness to the pursuit of personal goals, and a reliable assistance in their accomplishment. Goal undermining on side of a partner was characterized by a restriction of opportunities to work on personal goals, unresponsiveness to goal pursuit, and behaviors that directly conflicted with personal goal attainment. Despite the fact that interpersonal goal support and hindrance were assessed separately, goal hindrance was recoded and collapsed with reports of goal support. The authors could show that this index of goal support was positively associated with differences in goal accomplishment later on (Brunstein et al., 1996).

Another study on social aspects of personal goal achievements is presented by Zaleski (1988). The author shows that goal support on the part of a romantic partner was positively associated with the persistence to work towards personal goals (Zaleski, 1988).

According to the above-presented results and based on the assumption that conflict and convergence in interpersonal goal relations affect goal-relevant means, it is expected that a positive relationship between partners' goals provides the individual with many opportunities to work on his or her personal goals and increases the persistence in working on goal-relevant tasks, whereas a negative relationship between partner's goals is thought to be associated with a restricted range of opportunities for goal enactment. Hence, it is proposed that interpersonal goal conflict is negatively related to the degree of progress on work and family goals in the present sample. Interpersonal goal convergence, in contrast, is expected to

be positively associated with the extent to which the employed parents of this sample progress on their personal goals.

2.3.2.2. Experiential Indicators

Subjective well-being represents the most frequently used indicator of developmental success. It seems to be linked to various aspects of self and personality as well as behaviors in many domains of life (Diener, Suh, Lucas, & Smith, 1999; Higgings, Grant, & Shah, 1999; Warr, 1999). Telic theories of well-being propose that happiness is gained when personal goals are reached (Diener, 1984; Diener et al., 1999). These theories are based on the assumption that people react in positive ways when they manage to progress on their personal goals and negatively when failing to achieve them. Hence, progress on personal goals is thought to represent a reference point for the experience of emotions (Brunstein & Maier, 2001; Diener et al., 1999).

Several empirical studies provide evidence for the important role that goal progress plays for individual differences in well-being. Diener and Fujita (1995) demonstrate that the relationship between personal resources and well-being is mediated by the extent to which resources are helpful for the attainment of personal goals. Additionally, Emmons (1989) shows that past fulfillments of personal strivings are positively related with experiences of positive affect. And Brunstein (1993) finds that students who reported progressing a lot on their goals during the course of one semester display higher levels of well-being than those who do not progress on their goals.

Based on the presented research it is assumed that goal progress constitutes an important source of subjective well-being. It is therefore expected that employed parents who progress on their work and family goals during time in study will report higher levels of well-being than those who do not observe any progress with respect to their personal goals.

2.4. Summary and Working Model

The preceding chapter served as an introduction of the theoretical framework of this study, a description of the central predictors, and their relationship with different indicators of developmental success. Following life-span theory it is assumed that each period of life is characterized by specific demands and opportunities that form the background on which people produce their own development through the setting and pursuit of personal goals (P. B. Baltes et al., 1998; Lerner & Walls, 1999). In line with the concept of developmental tasks and the social clock model it is assumed that work and family play an important role in

middle adulthood (Cantor & Sanderson, 1999; Hagestad & Neugarten, 1985; Havighurst, 1952; Helson & McCabe, 1994; Lachman, 2004). Because the combination of work and family bears the potential for both stress and enhancement, the question becomes which aspects of personal goal systems contribute to developmental success (Perry-Jenkins, Repetti, & Crouter, 2000; Klumb & Lampert, 2004).

So far most research on personal goals has focused on the individual, and it can be shown that people benefit when multiple goals are integrated into a coherent goal system (Riediger & Freund, 2004; Sheldon & Kasser, 1995). Research conducted on intraindividual goal relations provides evidence that the mechanisms linking intraindividual goal interference and facilitation with developmental outcomes might differ (Cantor et al., 1992; King et al., 1998; Riediger & Freund, 2004; Sheldon & Kasser, 1995).

Under the assumption that the integration of work and family goals in employed parents requires coordinative efforts between the partners and benefits from social support by members of the extended family network, this study focuses on the role that conflict and convergence in interpersonal goal relations within the partnership and access to grandparental childcare play for the management of multiple goals in the present sample of employed parents with preschool children. Figure 2 illustrates the working model which reflects the main concepts and hypotheses of the present study.
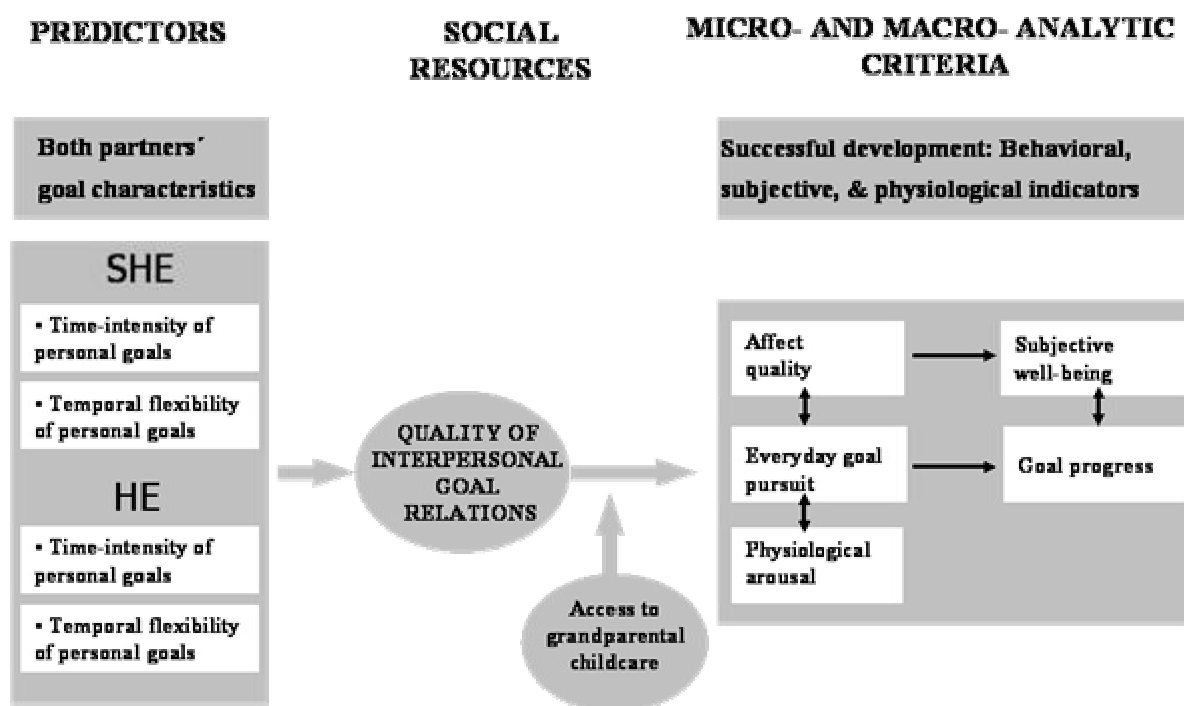

Figure 2. *Working model*

According to the model of selective optimization with compensation, it is assumed that individuals ought to select goals that match their personal resources (Freund & P. B. Baltes, 2000). In line with the observation that time is a very limited resource among young parents (Bittman & Wajcman, 2000), this study examines the extent to which employed parents select work and family goals that fit their limited time and flexibility during this particular phase in life. Due to the fact that the development of closely related individuals is intertwined, both partners' time-related goal characteristics are related to the quality of interpersonal goal relations (M. M. Baltes & Carstensen, 1998). It is proposed that partners who set very time-intensive goals that can only be pursued at specific points in time have more conflicting goals than partners whose goals are low in time-intensity and high in temporal flexibility.

The quality of interpersonal goal relations between the partners is assumed to influence goal-relevant means and is thought to represent one structural characteristic that helps to differentiate more successful from less successful development in husbands and wives. Negative interpersonal goal relations – interpersonal goal conflict – have been defined by a restriction of resources and action hindrance. Positive interpersonal goal relations – interpersonal goal convergence – are linked to resource extension and action facilitation (Deutsch, 2000; Wilensky, 1983).

In line with self-regulation theories (e.g. Carver & Scheier, 1982; 2002, Gollwitzer & Moskowitz, 1996; H. Heckhausen, 1991; Schwarzer, 2000) it is proposed that employed parents who are subject to disturbances and resource constraints have difficulties in working on their goals in everyday life, display a great variability in goal pursuit, and do not progress on their goals in the long run. Interpersonal goal convergence is expected to optimize goal-relevant means, increase the persistence in personal goal pursuit, and should therefore be positively associated with the engagement in everyday activities furthering personal goals as well as goal progress in the long run.

Access to grandparental childcare is thought to contribute to the successful pursuit of work and family goals, because it constitutes a key social resource for employed parents (Alt, 1994). It is expected that the availability of grandparental childcare provides working parents with a reliable back-up system, thus facilitating the simultaneous pursuit of multiple goals. This social resource is thought to be particularly important if partners encounter difficulties in coordinating their goals because it offers compensatory means under conditions of high interpersonal goal conflict.

Finally, it is expected that goal pursuit and goal progress are associated with high levels of subjective and physiological well-being. In line with emotion-regulation models (Carver & Scheier, 2000) and telic theories of well-being (Brunstein & Maier, 2001; Diener et al., 1999) it is assumed that the performance of activities furthering personal goals and goal progress are important sources of subjective well-being. Based on the biopsychosocial stress model by Frankenhaeuser (1994) it is proposed that partners who are unable to engage in goal pursuit or who find themselves performing activities that hinder their goals display high levels of physiological arousal as indicated by free cortisol in saliva.