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Whole-Life Career Self-Management: A Conceptual Framework

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Abstract

Contemporary careers require flexible career self-management across the lifespan that takes work and nonwork roles into account. However, existing models of career self-management do not focus on how work and nonwork life domains interact in this process and work-life research largely neglected a careers perspective. To address this issue, we present a new theoretical framework of career self-management that considers the intersection of work and nonwork roles. Our model integrates insights from career self-management, action regulation, and the work-nonwork interface to propose how goals, action plans, and behaviors across work and nonwork roles are dynamically linked and how these processes lead to career satisfaction, work-life balance, and psychological well-being, affected by contextual and personal role expectations and resources and barriers. Our framework has implications for the theoretical understanding of career self-management, the work-life interface, a whole-life perspective on career development, and contextual factors in career development across the lifespan.

Keywords: career self-management; work-nonwork; career success; lifespan; action regulation

Whole-Life Career Self-Management: A Conceptual Framework

The relevance of career self-management has grown in recent years due to increased dynamics in the labor market, organizational restructuring, and changes in individuals' attitudes (Hall et al., 2018). For an increasing number of people there is also a closer interconnection between work and nonwork roles in career development (Greenhaus & Kossek, 2014). There is strong research evidence that work and nonwork are highly interconnected for many people (Allen et al., 2014; Shockley, 2018). In addition, evidence is accumulating that career decisions, actions, and outcomes are often strongly affected by nonwork roles (e.g., Hoobler et al., 2010; Schooreel et al., 2017). It is hence critical that current career development research takes nonwork roles into account and that work-life theory integrates a careers perspective (Greenhaus & Kossek, 2014; Powell et al., 2019).

Several models of career development and career self-management acknowledge that nonwork issues are important in career development. Super's (1957, 1990) life-span, life-space approach conceptualized people as actively engaged in developing their career over the lifespan while taking different life roles into account. However, this approach does not specify the cognitive and behavioral processes by which people self-direct their careers and how the pursuit of career goals interacts with goal pursuit in other important life roles. The protean career model (Hall et al., 2018) acknowledges that people with a protean career orientation take a more holistic view when developing their careers (i.e., take nonwork roles into consideration). However, the framework does not provide concrete theorizing on the processes through which people manage their careers under simultaneous consideration of career and nonwork goals. Theoretical frameworks that focus on the process of career self-management include the social cognitive model of career self-management (Lent & Brown, 2013) and the career (self-) management models by Greenhaus et al. (2010) and King (2004). However, these models also do not specifically address the processes through which work and nonwork goals and actions intersect nor the conditions under which such interactive effects are more or less likely. In addition, beyond focusing on the family-relatedness of work decisions (e.g., Greenhaus & Powell, 2012), existing work-life research has largely neglected incorporating a careers perspective to explain how people manage multiple life roles (Powell et al., 2019). In sum, despite calls to better integrate insights from the work-family literature and career development research and practice (Greenhaus & Kossek, 2014), existing models of career self-management have only sparsely and not comprehensively integrated nonwork issues into their theorizing. This lack of conceptual clarity hinders empirical progress as well as the ability to derive more targeted and impactful practice applications that can help people manage their

careers in a holistic and sustainable way.

To address these shortcomings, we build upon insights from research on career self-management, action regulation theory, and the work-nonwork interface and present a theoretical model of career self-management across work and nonwork life domains. We refer to this as “whole-life” career self-management to describe a process of proactive career development under consideration of different life domains with a focus on satisfaction and effectiveness in multiple life roles (DiRenzo et al., 2015). In addition, we also position our “whole-life” framework as depicting career self-management across the lifespan. We refer to *work* and *nonwork* as distinct life domains. In contrast, *career* refers to the sequence of an individual’s work experiences over time (Hall, 2002). Career goals, plans, and actions are thus not restricted to the current job but can encompass the entire working lifespan, including a variety of specific goals, plans, and actions directed toward attaining future desired states or objects (e.g., positioning behavior, influence behavior, boundary management; King, 2004).

In our framework, we conceptualize career self-management as an action regulation process that will typically take place over a longer period of time, ranging from several weeks or months to multiple years (Raabe et al., 2007). Action regulation theory conceives people as active agents of their own development who create and set goals, monitor available supports and constraints for goal attainment, translate goals into action plans, execute plans via diverse behaviors, monitor actions and outcomes, and process feedback to change goals, action plans, and behaviors accordingly (Frese & Zapf, 1994; Lord et al., 2010; Zacher & Frese, 2018). From this perspective, people pursue various goals over their life course (including career and family goals) and use a range of goal management strategies to optimize available resources and react to changes in personal and contextual conditions (Heckhausen et al., 2010). Similar to the action regulation model of work-family balance by Hirschi et al. (2019), we moreover conceptualize career self-management as an action regulation process at the intersection of work and nonwork roles. Our model is thus founded on the basic presumption that people actively pursue goals in work and nonwork life domains through the development and execution of various action strategies.

We present a framework (Figure 1) how role expectations as well as resources and barriers affect career self-management and its outcomes in a dynamic action regulation process based on six propositions. These outline (1) how work and nonwork action regulation is influenced by role expectations, resources, and barriers; (2) how career and nonwork action regulation affect each other; (3) how this process leads to career and nonwork goal attainment, including (4) effects of role expectations, resources, and barriers; (5) how goal attainment

predicts career well-being; and (6) how this process is monitored and feedback is processed within dynamic feedback loops. Overall, we advance research by integrating insights from career self-management and the work-nonwork literature to propose new theory on the interrelatedness of different life roles in career self-management.

A Framework of Career Self-Management from a Whole-Life Perspective

Our integrative framework is based on three key components. First, we outline how career self-management can be understood as a dynamic action regulation process at the intersection of work and nonwork life roles, affected by personal and contextual role expectations and resources and barriers. Second, we describe how this process contributes to well-being in terms of career satisfaction, work-life balance, and psychological well-being. Third, we elaborate on the functions of monitoring and feedback processing in dynamic, adaptable career self-management.

Career Self-Management Considering Work and Nonwork Life Domains

We conceptualize career self-management as a dynamic action regulation process that consists of developing and selecting goals, orienting oneself in the environment, planning, monitoring, and feedback processing (Zacher & Frese, 2018). The proposed processes can unfold over several months or years with multiple shorter-term action regulation sequences (e.g., attaining a promotion, having a child) hierarchically embedded within longer-term ones (e.g., having a successful career, being a caring father). It is beyond the scope of our framework to directly address all such possibilities, but the herein proposed schematic model is important to understand the basic functioning of such more dynamic processes.

Consistent with action regulation theory (Zacher & Frese, 2018), we presume that individuals develop and set goals, which then lead to the development of specific action plans that guide behaviors. The implementation of such plans, in turn, results in varying degrees of goal attainment. For example, job search research shows that job search intentions predict job search behaviors, which in turn predict reemployment success (van Hooft & Noordzij, 2009). Consistent with research on multiple goal pursuit (Unsworth et al., 2014), we expand this perspective and presume that people develop and select goals in different life domains under consideration of how the pursuit of a specific goal in one life domain (e.g., work) will affect their ability to attain goals in other life domains (e.g., family). Research on multiple goal pursuits supports the idea that people actively consider how the pursuit of some goal affects the expectancy to attain other goals (Heckhausen et al., 2010; Vancouver et al., 2010). Specifically, research shows that people consider multiple-goal effects in their action regulation (Sun & Frese, 2013) and that family factors affect work decisions (Powell &

Greenhaus, 2010). Based on this research, we assume that, to self-manage their careers, people develop and set career goals, develop action plans, and execute career behaviors under consideration of how this affects the possible attainment of nonwork goals, and vice versa (Hirschi et al., 2019). As a concrete example, if a student is deliberating about whether to train as a surgeon she might consider the implications of working long hours along with the simultaneous goal of becoming a caring mother and spending time with her children.

Contextual and Personal Influences on Work and Nonwork Action Regulation

Our framework also considers the influence of facilitating and hindering contextual and personal factors in action regulation (Zacher & Frese, 2018) and career self-management (Lent & Brown, 2013), specifically role expectations and resources and barriers. Role expectations represent the demands that people have to fulfill in different life roles (Clark, 2000; Edwards & Rothbard, 2000). Resources and barriers represent the supports and constrains people face in terms of meeting demands in different life roles (ten Brummelhuis & Bakker, 2012) and to attain career and nonwork goals (Hirschi et al., 2019). For example, research suggests that gender role expectations, knowledge and skills, organizational support, and age discrimination in organizations can all meaningfully affect retirement decision-making and engagement in retirement planning (Pak et al., 2019; Wang & Shi, 2014). At the other end of the career lifespan, social support did positively predict adolescents' engagement in career exploration and planning behaviors (Han & Rojewski, 2015).

Our framework incorporates a lifespan perspective, which suggests that people pursue various work and nonwork goals over their lifespan and use a range of goal management strategies to optimize available resources and react to changes in personal and contextual conditions (e.g., Freund & Baltes, 2000; Heckhausen et al., 2010; Wiese et al., 2000). For instance, physical energy and information processing abilities, on average, tend to decline with age, whereas human and social capital (e.g., experience, networks) seem to increase (Kanfer et al., 2013; Zacher et al., 2018). Hence, age-related changes in role expectations, role boundaries, as well as resources and barriers can explain why people's goals change across the working lifespan (Kooij et al., 2011), and why people develop and use different action regulation strategies over the lifespan (Heckhausen et al., 2010; Hertel et al., 2015; Moghimi et al., 2016).

Role expectations and resources and barriers are shaped by a person's life experiences, career history, career stage, as well as various individual (e.g., gender, abilities, disabilities, predispositions) and contextual factors (e.g., family situation, organizational context, economic constraints) (Lent & Brown, 2013). We are thus proposing that these factors affect career self-management processes because they create role expectations, resources, and barriers which, in

turn, affect action regulation processes. As such, our model offers specific theorizing on *how* and *why* career history and various person and context factors affect the career self-management process. Role expectations, resources, and barriers exist on the contextual as well as personal level and encompass a range of more specific variables (see Table 1 for examples of specific constructs in each domain). For example, in a late career stage, workers may be faced with the role expectation to start disengaging from their career, have the personal resource of a broad acquired social network, and face the barrier of age-stereotypes about performance (Wang et al., 2013).

In addition, we acknowledge that role demands, resources, and barriers can also be changed by individual action regulation (Hirschi et al., 2019), as indicated by the dotted arrow in Figure 1. For example, by engaging in career and nonwork actions, role demands can be negotiated with role senders (e.g., different job requirements, shared childcare responsibilities), new resources can be developed (e.g., new skills, additional social support), and barriers can be reduced (e.g., lobbying to change organizational policies).

Role expectations. At the contextual level, role expectations regarding work and nonwork exist in the proximal social environment, such as expectations of one's partner or supervisor, who act as role senders (Edwards & Rothbard, 2000) or border-keepers (Clark, 2000). The social environment communicates expectations regarding role performance as well as what constitutes a role and its boundaries. These role expectations impose certain tasks and demands that people can redefine into personal goals and behaviors (Edwards & Rothbard, 2000). Moreover, role expectations can also exist at more distal and abstract contextual levels such as family norms, organizational culture, or cultural norms regarding work and nonwork roles. People can also shape their own role expectations, which are often expressed through work and nonwork identities and values (Greer & Egan, 2012).

Resources and barriers. In accordance with Halbesleben et al. (2014), we define resources as anything that helps attain career and nonwork goals. We further define barriers as anything that prevents from attaining career and nonwork goals (Hirschi et al., 2019). Contextual resources can include work-nonwork support in the proximal social environment (e.g., partner), organizational support programs at the meso-level, or public policies that provide affordable and accessible child care at the exo-level (ten Brummelhuis & Bakker, 2012). Contextual barriers can include discriminatory behaviors of a supervisor in the proximal work environment, inflexible work hours policies in an organization, or cultural biases against employed women at the meso- and exo-level, respectively. At the personal level, resources can include positive attitudes (e.g., career commitment), positive traits (e.g., emotional stability),

or knowledge and skills (e.g., professional competencies) (ten Brummelhuis & Bakker, 2012). Barriers at the personal level can be negative attitudes (e.g., self-doubt), or dysfunctional traits (e.g., external locus of control).

Moderating effects of contextual and person factors on goal expectancy. We propose that when people engage in career action regulation (i.e., develop and set career goals, develop career action plans, and engage in career behaviors) this affects the expectancy of nonwork goal attainment, and vice versa (Figure 2). Facilitative connections between career and nonwork goals can occur based on role enrichment processes, when engagement in one role facilitates functioning in another role due to the transfer of resources between roles (Edwards & Rothbard, 2000; Greenhaus & Powell, 2006; ten Brummelhuis & Bakker, 2012). Conversely, inhibitory goal connections are based on role conflict, which occurs if life roles are mutually incompatible in some respect, for example, due to personal resource drain or their incompatible demands on time, energy, or behaviors (Edwards & Rothbard, 2000; ten Brummelhuis & Bakker, 2012). We propose that the extent to which such facilitatory or inhibitory effects on goal attainment (and thus goal expectancy) across life domains occur depend on personal and contextual role expectations as well as resources and barriers.

The goals people expect to attain in their career and nonwork roles depend on the expectations of role senders as well as their personal *role expectations* (e.g., priorities, role salience; Edwards & Rothbard, 2000). We presume that goals are harder to attain under condition of high versus low role expectations, because role senders can impose demands that are expected in a particular role and, thus, require the according investment of resources of a focal person (Edwards & Rothbard, 2000). Similarly, with high personal role expectations a person will allocate available resources to that role by setting priorities accordingly when considering resource investment across life roles (Powell & Greenhaus, 2010, 2012).

This investment of resources in a specific domain (e.g., work) could have a negative effect on the extent to which goals in another life domain (e.g., family) can be attained, especially when high role expectations exist in that other domain. For example, a spouse can express the expectation that a person is constantly available for family matters. As a consequence, this high role expectation should attenuate the person's expectancy that family goals can be attained (i.e., taking care of family needs) when engaging in the pursuit of career goals (e.g., to become a manager with frequent travel obligations). Similarly, if a person has high personal expectations for the work role, this could increase the potential negative effects of pursuing goals in the nonwork domain on the expectancy that career goals can be attained. Examples are when the goal of having children negatively affects the expected likelihood of

attaining a competitive promotion, or when the goal of continuing working after retirement negatively affects the expected likelihood that the goals of spending significant time with a retirement spouse and caring for grandchildren can be attained.

In addition, the extent to which multiple goals can be attained strongly depends on *resources and barriers* (Hirschi et al., 2019). We argue that with sufficient resources and few barriers, the pursuit of goals in one life domain has minimal effects on the expected likelihood that goals in another life domain can be attained. This is because goals in each life domain could be attained largely irrespective of other goals due to generally favorable goal attainment conditions. For example, a person with many financial resources and high levels of family support could successfully pursue the nonwork goal of ensuring that family is well cared for without experiencing a significant reduction in expectancy to also achieve the career goal of becoming a recognized leader in her field of work.

However, with limited resources and strong barriers, mutual goal linkages play a stronger role because resource depletion is more likely, leading to negative effects for the attainment of multiple goals. For example, for a person who does not have a great deal of coworker support (low resources), the pursuit of nonwork goals (e.g., taking care of family needs) would have a stronger negative effect on the expectancy to attain career goals (e.g., obtaining a promotion) compared to someone with more resources at work (e.g., high coworker support). Research supports the idea that concerns about how multiple goals in work and nonwork domains can be attained seem to be especially pronounced when faced with incompatible role expectations, fewer resources, and significant barriers for goal attainment, such as gender roles, unavailability of flexible work arrangements, or restrictions in income (McDonald, 2018).

Proposition 1a: The pursuit of career (nonwork) goals, action plans, and behaviors negatively affects nonwork (career) goal expectancy, when role expectations are high, resources are low, and barriers are high.

Proposition 1b: The pursuit of career (nonwork) goals, action plans, and behaviors positively affects nonwork (career) goal expectancy when demands are low, resources are high, and barriers are low.

According to goal setting theory research, people are more likely to pursue goals which they believe that they can attain (i.e., have high goal expectancy) (Locke & Latham, 2002). Relatedly, research based on control theory shows that people adjust or abandon their goals if they believe that a goal can no longer be attained (Carver & Scheier, 2002). This is also supported by research on multiple goal pursuit which shows that people adjust their goals,

plans, and behaviors if they perceive that pursuing one goal negatively affects the possibility to attain other goals (Heckhausen et al., 2010; Vancouver et al., 2010). We thus presume that a low goal expectancy leads people to adapt (which includes possibly abandon) their goals, action, plans, or behaviors related to that goal. Conversely, if people have high goal expectancy, we presume that they are more likely to persist in the pursuit of their goals, plans, and behaviors. Hence, our model suggests that people engage in a dynamic process in which they try to calibrate the pursuit of career and nonwork goals, under consideration of how pursuing goals in one domain affects the likelihood of attaining goals in another domain.

We extend this line of reasoning by including insights from valence–expectancy theory, which suggests that the likelihood of people engaging or disengaging from certain goals not only depends on the expectancy of a goal but also on its valence or value (Vroom, 1964). Research shows that people are especially likely to pursue goals if they have high expectancy combined with high goal value. Relatedly, people are more likely to abandon or adapt goals if expectancy and/or value are low (Vancouver et al., 2010). Applied to our framework, this implies that people are most likely to adapt or abandon a goal in a specific life domain if they have a low goal expectancy, combined with a low value of that goal. Conversely, we assume that if goal value is high, people might try to stick with their goals and find other means to attain them (e.g., adapt other goals, invest more effort) when faced with low goal expectancy. Moreover, high goal value should further increase the positive effect of high goal expectancy on persisting in the pursuit of current goals.

Proposition 2a: Lower nonwork (career) goal expectancy leads to an adaptation of nonwork (career) goals, action plans, and behaviors, conditional upon nonwork (career) goal value. Adaptation of nonwork (career) goals, action plans, and behaviors is more likely if nonwork (career) goal value is low.

Proposition 2b: Higher nonwork (career) goal expectancy leads to a persistence in nonwork (career) goals, action plans, and behaviors, conditional upon nonwork (career) goal value. Persistence in nonwork (career) goals, action plans, and behaviors is more likely if nonwork (career) goal value is high.

In our framework (Figure 2), we build upon the previously elaborated notions and presume that the pursuit of goals in career and nonwork are linked by dynamic action regulation across career and nonwork goals. This means that the pursuit of career goals affects the expectancy of nonwork goals (depending on role expectations, resources, and barriers), which can lead to an adaptation of nonwork goals (depending on nonwork goal value). This adaptation (or non-adaptation) in turn affects the expectancy of career goals (depending on role

expectations, resources, and barriers), which leads to a possible adaptation of career goals (depending on career goal value), and so on. Hence, our model suggests that people engage in a dynamic process in which they try to calibrate the pursuit of career and nonwork goals, under consideration of how pursuing goals in one domain affects the likelihood to be able to attain goals in another domain.

Work and Nonwork Action Regulation as Predictor of Well-Being Outcomes

We conceptualize different forms of well-being as the ultimate desired outcomes of career self-management generally, and the dynamic action regulation process across career and nonwork goals more specifically. Current career development theories stress that in the present career context, in which linear careers are becoming more the exception than the norm, people need to create their own career paths in pursuit of personally valued career and life outcomes and construct their own meaning in their career development (Hall et al., 2018; Savickas, 2013). As such, objective success indicators, such as a high salary or promotions, lose importance as the ultimate outcomes of career pursuits, and people instead increasingly strive to attain psychological success, satisfaction, and personal meaningfulness in their careers (Hall et al., 2018; Savickas, 2013). Relatedly, models in work-nonwork research primarily see successful work-nonwork management (e.g., high work-life balance) and well-being (e.g., life satisfaction) as the pivotal outcomes of how well people manage the work-nonwork interface (Shockley, 2018). In our framework, we theorize that well-being outcomes are achieved due to the positive effects of work-nonwork action regulation on career and nonwork goal attainment. These goals are idiosyncratic to the individual and can include psychological states (e.g., job satisfaction, family satisfaction), material rewards (e.g., salary gain), social rewards (e.g., promotions, recognition, affection), and life events (e.g., gaining employment, getting married). For career and nonwork goals that are very distant and abstract (e.g., being a good parent, being successful in one's career) a sense of goal progress can act as a proxy for goal attainment (Lent et al., 2005).

Research supports the notion that engagement in career behaviors can promote career goal attainment. For example, research on the school-to-work transition found that students who engage in career behaviors in terms of exploration and planning were more successful in attaining satisfying employment (Han & Rojewski, 2015). We extend this notion by proposing that dynamic action regulation across career and nonwork goals entails that people consider how the pursuit of a goal in one domain affects the likelihood to attain other goals in other life domains, under consideration of role demands, resources, and barriers. If necessary, this also means that people will adapt their goals, action plans, and behaviors (under consideration of

goal value) to better attain goals across multiple life domains. Such an adaptation can include that goals are pursued sequentially instead of simultaneously or that goals are revised or abandoned and replaced with more attainable goals (Hirschi et al., 2019). This dynamic adaptation process should thus lead to a goal system that is better calibrated given the specific goals that a person pursues, and adequately considers the specific role expectations, resources, and barriers that exist on a contextual and personal level. Hence, active and dynamic action regulation across career and nonwork goals should make the attainment of goals in the work and nonwork domain more likely.

Proposition 3: Engagement in dynamic work and nonwork action regulation positively affects the attainment of career and nonwork goals.

In addition to work and nonwork action regulation, our framework also includes the notion that contextual and person factors directly affect career and nonwork goal attainment. This is consistent with the view that outcomes in career development do not only depend on individual actions but also on various contextual as well as person factors (Lent & Brown, 2013). Role expectations are important in this regard because different expectations can affect the probability of goal attainment, irrespective of individual behaviors. In particular, trying to meet high role expectations across multiple roles can result in resource drain and make goal attainment more difficult (Edwards & Rothbard, 2000; ten Brummelhuis & Bakker, 2012). For example, high contextual or personal role expectations (e.g., constant availability at work, superior job performance, spending significant hours taking personal care of children) make it harder to attain other-domain goals which are likewise high (e.g., high job performance, high family satisfaction) than would be the case with more modest expectations (e.g., being allowed time-off work, fulfilling basic job expectations, only spend weekends with children). In addition, contextual and personal resources and barriers by definition make the attainment of career and nonwork goals more or less likely, respectively. Hence, people with more favorable conditions regarding contextual and personal resources and barriers should more easily attain career and nonwork goals, even if their action regulation is not optimal. Conversely, unfavorable conditions in resources and barriers should make goal attainment more difficult, even if the person engages in very well-choreographed action regulation across career and nonwork goals.

Proposition 4: Low role expectations, high resources, and few barriers positively predict career and nonwork goal attainment.

Our model further assumes that goal attainment and goal progress are important predictors of domain-specific and general well-being. This assumption is in accordance with

the social-cognitive model of domain and life satisfaction (Lent et al., 2005) and generally supported by empirical research (Brown & Lent, 2019). We hone in on three specific well-being outcomes: career satisfaction, work-life balance, and psychological well-being. Each taps into different foci of well-being in terms of career development, the work-nonwork interface, and life more broadly. Career satisfaction refers to the self-evaluation of satisfaction with career progress or other valued career outcomes by an individual (Spurk et al., 2019). It thus represents the subjective, or psychological, success that people experience regarding their work role and career development. Work-life balance refers to feeling engaged in, effective, and satisfied across life roles, according to personal values (Wayne et al., 2017). It thus represents a state of well-being at the interface of work and nonwork roles. Finally, psychological (or subjective) well-being is a broad construct that includes a sense of overall satisfaction with one's life, the experience of positive and the absence of negative emotions, as well as eudemonic components such as a sense of purpose and meaning in life, personal growth, or environmental mastery (Diener et al., 1999).

We propose that these different forms of well-being are predicted by attaining and making progress towards goals in work and nonwork life domains. At a general level, goal setting theory research supports the idea that attaining goals leads to positive emotions and a sense of satisfaction, especially if these goals correspond to personal values. In addition, goal progress is by itself an important contributor to well-being, as people generally feel positive about a sense of progress in getting closer to personally valued goals, even if these goals are not yet attained (Locke & Latham, 2002). Conversely, the failure to attain valued goals and a sense that aspired goals cannot be attained due to insufficient goal progress can lead to negative emotions and self-evaluations (Locke & Latham, 2002).

Regarding *career satisfaction*, because a career consists of a person's cumulative work experiences, this means that attaining career goals should promote a sense of satisfaction with one's career in general. In addition, research shows that many people evaluate having a positive personal life outside of work as an important factor of subjective career success (Shockley et al., 2016). Hence, being able to achieve nonwork goals besides the work role can be considered as one facet of subjective career success and the attainment of nonwork goals should thus also contribute to career satisfaction. In addition, work-family research supports the idea that people make positive or negative attributions to the source role which causes positive or negative consequences in another role (Shockley & Singla, 2011). This means that if people can attain nonwork goals, they might attribute this positively to their career which allowed them to do so.

Conversely, if nonwork goals cannot be attained, they might blame their careers for hindering the fulfillment of their aspirations in other life domains, leading to reduced career satisfaction.

Regarding *work-life balance*, the active engagement in career and nonwork goal pursuit according to personal values is an important part of experiencing balance (Casper et al., 2018). Moreover, attaining goals in work and nonwork roles should lead to a sense of effectiveness across life roles, which in turn promotes satisfaction in these life roles according to goal setting theory research (Locke & Latham, 2002). In accordance with Hirschi et al. (2019), we thus assume that attaining personally valued goals in work and nonwork is a key contributor to experiencing work-life balance.

Finally, we posit that *psychological well-being* is positively predicted by the attainment of personally valued career and nonwork goals. This assertion is again based on research showing positive effects of goal attainment and goal progress on satisfaction and affective experiences (Locke & Latham, 2002). Moreover, if people can attain personally valued goals across life domains, this should also contribute to eudemonic well-being, such as a sense of meaningfulness, personal growth, or mastery due to being able to attain personally valued aims. Because work and nonwork roles each form uniquely important aspects in most people's lives, we presume that attaining goals in both areas uniquely contribute to higher psychological well-being.

Proposition 5: Career and nonwork goal attainment positively predict well-being in terms of (a) career satisfaction, (b) work-life balance, and (c) psychological well-being.

Monitoring and Feedback Processing in Career Self-Management

An important component of successful career self-management is that people need to be adaptable and flexible, that is, they have to be able to cope with expected and unexpected changes and challenges in their career development (Hall, 2004). However, there is currently not much empirical research on how people process feedback in their career management. Some emerging research suggests that people indeed use feedback on goal suitability, goal progress, and need for improvement in goal pursuit to adjust or disengage from career goals (Hu et al., 2017). More generally, meta-analytic research of experimental studies confirms that monitoring goal progress is related to higher goal attainment (Harkin et al., 2016).

Our model integrates these insights and also expands the existing literature by conceptualizing learning experiences and feedback processing in career self-management as a dynamic, intentional, self-directed process of monitoring and feedback processing across career and nonwork goal pursuit (Figure 1). According to action regulation theory, people actively monitor the personal and contextual conditions that support or inhibit their ability to

attain goals (Frese & Zapf, 1994; Zacher & Frese, 2018). Translating this assumption to our model, we propose that career self-management is a highly dynamic process where people monitor changes in contextual and personal role expectations and resources and barriers and how such changes relate to their career and nonwork goal pursuit. This can lead people to adjust their goals or abandon their goals and adopt new goals, if contextual and/or personal factors change in a way that existing goals are no longer attainable (Heckhausen et al., 2010; Lord et al., 2010; Zacher & Frese, 2018). For example, if family role expectations change due to having a child, the action plan of how to attain the goal of a promotion might change from focusing on working long hours to soliciting more help from supervisors and colleagues.

In addition, action regulation theory states that people monitor which outcomes are achieved with their behaviors (Zacher & Frese, 2018). Hence, if the outcomes (i.e., career and nonwork goal attainment, experienced well-being) are not as expected/desired or if goal progress is too slow, people will adjust their goals, action plans, or behaviors to better attain their goals. Based on the outlined dynamic work and nonwork action regulation process (Figure 2), our model specifically presumes a close connection between work and nonwork action regulation processes. This means that we propose that processing feedback on career goal attainment leads to a dynamic adjustment in nonwork goals, action plans and behaviors, and vice versa. For example, if pursuing the nonwork goal of being a good parent by picking up children from school impairs attaining the career goal of getting a promotion due to missing important meetings, a change in action plans and behaviors would occur that includes other means, such as sharing the responsibility of picking up the children with one's partner, parents, or neighbors.

In sum, we propose that if monitoring shows that changes in contextual and personal factors no longer permit the attainment of existing career and nonwork goals, people will dynamically adapt their career and nonwork goals, plans, and behaviors accordingly. In addition, if monitoring shows that career and nonwork behaviors do not result in the desired outcomes (i.e., career and nonwork goal attainment, well-being), people will adapt their career and nonwork goals, plans, and/or behaviors accordingly. These adaptations in work and nonwork action regulation would in turn positively affect the attainment of career and nonwork goals and subsequent well-being.

Proposition 6: Monitoring and feedback processing of (a) changes in personal and contextual role expectations, resources, and barriers, (b) career and nonwork goal attainment, and (c) well-being leads to a dynamic adaptation in work and nonwork action regulation.

Theoretical Implications and Future Research Directions

Career Self-Management and the Work-Life Interface

Research in vocational psychology has extensively focused on how people make career decisions (e.g., Phillips & Jome, 2005), on individual differences in career behaviors such as career exploration or networking (e.g., Ren & Chadee, 2017), or on the conditions that lead to various career outcomes, most prominently career success (Spurk et al., 2019). Our model suggests that all of these phenomena can be better understood by considering how career self-management is linked to nonwork goals, action plans, and behaviors. For example, researchers could test our model by examining how action plans and behaviors to achieve career goals (e.g., engaging in influence tactics for promotions) are affected by the desire to also achieve nonwork goals (e.g., desire to spend time with children). Likewise, the model can be used to test how the attainment of nonwork goals affects career satisfaction and psychological wellbeing beyond, and interaction with, the attainment of career goals. By explicitly integrating work-nonwork linkages into a model of career self-management, our framework thereby addresses the call for more specific theories to understand career self-management and career success from a work-home perspective (Greenhaus & Kossek, 2014). In the same vein, it addresses a gap in theorizing on the work-life interface by integrating a careers perspective with work-nonwork considerations (Powell et al., 2019).

Our framework shares several key issues with existing career self-management models (Greenhaus et al., 2010; Hall et al., 2018; King, 2004; Lent & Brown, 2013; Super, 1990), namely that career self-management needs to be considered across time and life roles, that cognitive, motivational, behavioral, and contextual factors need to be jointly considered, and that career self-management is a dynamic process that includes feedback-loops. However, we also go beyond these related models to more specifically theorize on *how* work and nonwork life domains interact in career self-management.

Future research could build upon our framework to more closely investigate how various aspects of career self-management (including career decisions and behaviors) are affected by nonwork considerations as well as personal and contextual supports and barriers. For example, the model could be tested by studying to what extent career choices of students are affected by considerations of nonwork goals, and how such effects are shaped by different role expectations (e.g., parental expectations), resources (e.g., peer support), and barriers (e.g., restrictive parental leave policies). In addition, studies based on our framework could examine whole-life career management action regulation dynamics across different temporal and goal levels, where daily and weekly processes (e.g., finishing a work project, picking up kids from

school) are embedded in action regulation cycles that span several months or years (e.g., getting a promotion; successfully bringing kids through college).

Contextual and Sociocultural Factors in Career Self-Management across the Lifespan

While our framework highlights the active role that individuals play in managing their careers, we also include the notion that the career self-management process and its outcomes are strongly affected by personal and contextual factors (i.e., role demands, resources, barriers) that are often outside of an individual's direct control and that sometimes constrain people's career agency and work volition (Duffy et al., 2016). Our model thus addresses an important critique of many models of career self-management as being overly individualistic and neglecting the importance of context (Duffy et al., 2016; Inkson et al., 2012).

As such, our theory also helps to better understand the role of happenstance and serendipity (Krumboltz, 2009) as well as career shocks (Akkermans et al., 2018) in self-directed career management. Our model contributes to these literatures by suggesting that monitoring changes in role expectations and resources and barriers and adapting goals, action plans, and behaviors accordingly allows people to capitalize on unexpected opportunities and to react to unforeseen events while self-directing their careers to achieve career and nonwork goals. As such, we also extend existing career self-management models (e.g., Hall, 2004; King, 2004; Lent & Brown, 2013) by providing more specific theorizing on the active role that individuals assume in adapting their goals, plans, and behaviors based on intentional monitoring and feedback processing. As our model suggests, people can be self-directed and values driven in their careers by pursuing goals through various actions while at the same time being adaptable by monitoring and processing feedback. Our model can be tested in future research, for example, by examining how people monitor and react to unexpected changes in their careers (e.g., a reduction in workforce in the organization) and how this affects their career goals and behaviors under consideration of their nonwork goals.

In addition, our model can help to explain how and why sociocultural factors in terms of career history, as well as person and context factors (e.g., age, gender, race/ethnicity, sexual orientation, social class, career-life period) affect career self-management from a whole-life perspective. Indeed, sociocultural variables (e.g., gender, age, race/ethnicity, career stage) are "empty" variables (or non-causal proxies) that do not constitute sufficient theoretical explanations for presumed effects (Zacher, 2015). Our framework should be broadly applicable across different genders, race/ethnicities, cultures, and career stages because it proposes that such sociocultural variables affect the career self-management process through their effects on personal and contextual role expectations, resources, and barriers. For example, research can

test our framework by examining how gender affects specific work and nonwork role expectations and how these expectations explain different career and nonwork behaviors. Likewise, research could test how role expectations, resources, and barriers for integrating work and nonwork roles vary across cultures and this can explain differences in career and nonwork goals, including their mutual effects. From a lifespan perspective, our model could be tested by exploring how certain role expectations (e.g., expected retirement age), resources (e.g., organizational support for older workers), and barriers (e.g., age discrimination) affect career goals and nonwork goals of workers across career stages, and how career and nonwork goals in turn jointly predict career behaviors (e.g., retirement decisions; see Kooij et al., in press).

Model Limitations

The presented model has some limitations that can be addressed by future theory development and research. First, we have proposed a parsimonious meta-framework on the major constructs and their relations to understand career self-management from a whole-life perspective, which necessarily resides at a fairly general level. Future research can identify and study specific variables within this framework, as we have illustrated throughout the paper with specific examples. In addition, we focused on career and nonwork goals, plans, and behaviors as broad categories. For reasons of parsimony, we did not elaborate on how individuals pursue multiple goals *within* work and nonwork life domains that might relate to goals in other life domains in different ways. Second, the model could not include all possible factors and their relations. For example, it is possible that person and contextual variables not only directly affect action regulation and goal attainment but also moderate the linkages between goals, plans, actions, and goal attainment. Similarly, goal characteristics (e.g., autonomous vs. controlled; intrinsic vs. extrinsic; Sheldon et al., 2004) could moderate the extent to which goal attainment predicts well-being. Third, due to various biases in information processing and decision-making (Kahneman, 2003), the proposed action regulation processes may not be optimally and rationally executed. For example, future research could explore how individuals may misjudge goal expectancy (i.e., show over- or under-confidence), and how this might affect their goal regulation, goal attainment, and well-being. Fourth, we have proposed a general framework of action regulation but this does not mean that everyone is actually engaged in such processes to the same extent. Research could examine how individuals differ in the degree to which they monitor and process feedback from their actions and goal progress across work and nonwork goals, what predicts such individual differences, and how this affects goal attainment and well-being.

Implications for Career Counseling Practice

The proposed framework offers several practice implications. When helping clients with career decision-making and career self-management, our framework implies that counselors should clarify preferences, interests, role expectations, resources, and barriers in work and nonwork roles. Clients could be assisted in better understanding how nonwork choices can affect their career choices (and vice versa) and facilitate or hinder the implementation of career choices and the attainment of career goals (and vice versa). Based on such a holistic understanding, clients could then explore which action plans and behaviors are most suitable to attain their career goals, under consideration of how their plans and actions might be affected by their nonwork goals (Hirschi, 2020). Moreover, clients can be assisted in monitoring their career and nonwork actions and their effects and how they can react to such information in ways that facilitate their goal attainment. The framework can also be informative in counseling focusing on enhancing client personal and professional well-being. As our model suggests, the attainment of career and nonwork goals can be seen as a major contribution to well-being and counselors could help clients develop and implement action strategies that maximize goal attainment across work and nonwork life domains.

Conclusion

Self-directed career management is increasingly conducted at the interface of work and nonwork roles. Our model addresses calls to conceptualize contemporary careers from a work-nonwork perspective and to integrate career-related phenomena into theorizing on the work-nonwork interface. We integrated insights from career self-management, action regulation, and work-life research to provide new theorizing for career self-management from a whole-life perspective. Our model thereby provides a useful reference for future empirical work on career self-management at the work-nonwork interface and might inspire new practice applications that aim to foster holistic and sustainable career development.

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Table 1

Contextual and Person Factors Affecting Action Regulation Across Work and Nonwork Roles: Examples of Constructs

	Contextual level	Personal level
<i>Role expectations</i>	<ul style="list-style-type: none"> • Role senders' performance and behavior expectations • Family norms • Organizational norms • Cultural norms 	<ul style="list-style-type: none"> • Role values and preferences • Personal role performance standards • Role salience and commitment • Nonwork orientations • Whole-life career perspective
<i>Resources & barriers</i>	<p><i>Resources</i></p> <ul style="list-style-type: none"> • Support from spouse • Supervisor support • Organizational programs • Public policy <p><i>Barriers</i></p> <ul style="list-style-type: none"> • Obstructive spouse behavior • Discrimination at work • Organizational policies • Cultural biases 	<p><i>Resources</i></p> <ul style="list-style-type: none"> • Self-esteem • Cognitive abilities • Professional knowledge and competence • Hope <p><i>Barriers</i></p> <ul style="list-style-type: none"> • Anxiety • External locus of control • Neuroticism • Dysfunctional beliefs

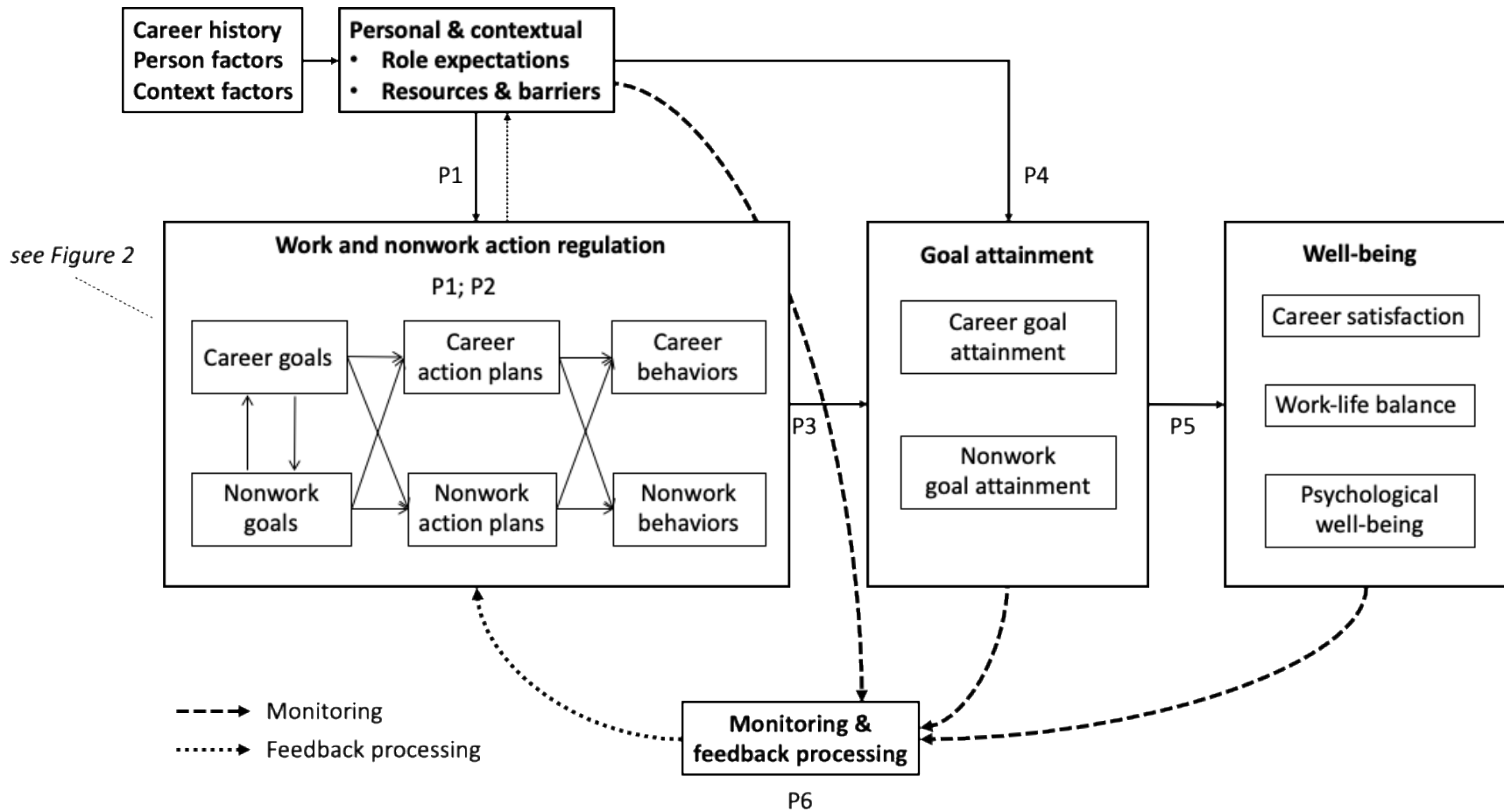


Figure 1. Theoretical model of whole-life career self-management. Numbers (P) refer to the propositions in the text.

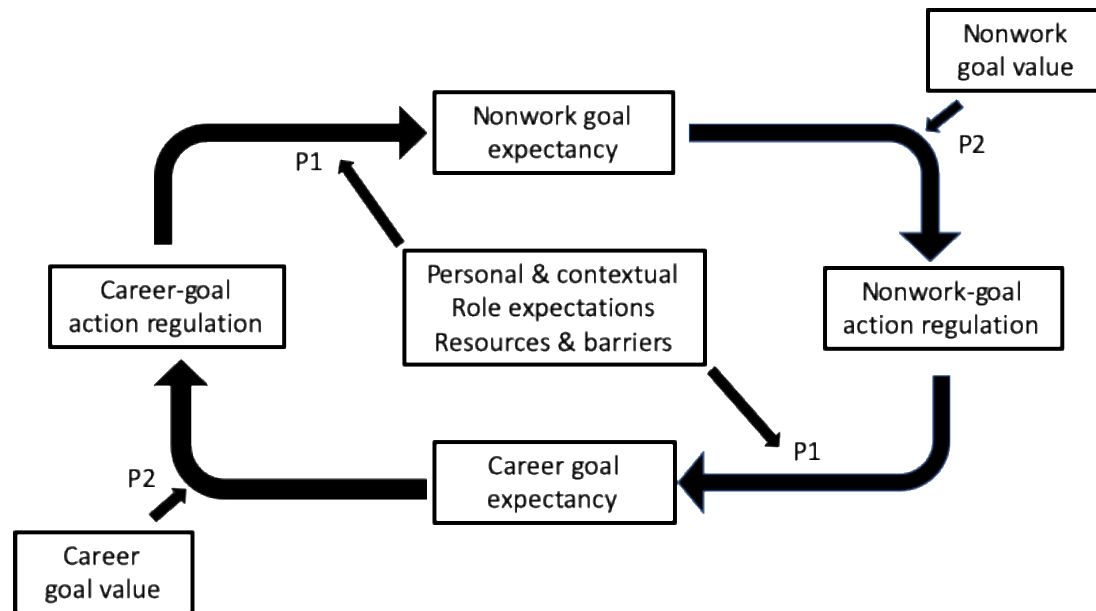


Figure 2. Work and nonwork action regulation process. Numbers (P) refer to the propositions in the text.