

Fall 10-2022

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Simmons, John; Wolff, Hans-Georg; Forret, Monica L.; and Sullivan, Sherry E., "A longitudinal investigation of the Kaleidoscope Career Model, networking behaviors, and career success" (2022). *Management Faculty Publications*. 32.

https://scholarworks.bgsu.edu/management_pub/32

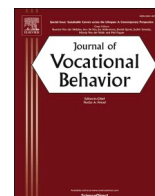


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Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Vocational Behavior

journal homepage: www.elsevier.com/locate/jvb

A longitudinal investigation of the Kaleidoscope Career Model, networking behaviors, and career success[☆]

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ARTICLE INFO

Keywords:

Kaleidoscope career model
KCM
Networking behavior
Career success

ABSTRACT

Increased global competition and rapid technological advancements have dramatically altered organizational structures and the work environment. The Kaleidoscope Career Model (KCM) was developed to explain how individuals enact their careers within today's complex, dynamic workplace. The KCM is particularly relevant for studying career development activities, such as networking behavior, a key career management strategy. The purpose of this longitudinal study is to examine the relationship between the three parameters of the KCM – authenticity, balance, and challenge – and how individuals target their networking behavior. In addition, we examine the relationship between the KCM parameters and career success outcomes, and whether these outcomes are mediated by networking behavior. Alumni from a Midwestern U.S. university were surveyed in 2012 and again in 2019. Overall, the results of this study showed a link between the parameters of the KCM and how individuals target their networking behaviors to help achieve their career goals.

1. Introduction

Studies on careers have found that individuals have become more self-directed (Briscoe et al., 2006; Hall et al., 2018; Hirschi & Koen, 2021). They move more frequently within and across organizational and country boundaries (Baruch et al., 2016; Guan et al., 2019), and transition in and out of the labor force in response to personal goals, nonwork demands, and changing economic conditions (Baruch & Rousseau, 2019; Sullivan & Al Ariss, 2021). One strategy to navigate the evolving career landscape is networking (Forret, 2018). Popular press articles urge job seekers to use networking, emphasizing that “the value of these networks is routinely and egregiously underestimated” (Fisher, 2019, p. 1). Studies suggest that the majority of all jobs are found through networking (Adler, 2016) and may never be publicly posted (Seaman, 2020). Likewise, academic research has focused on the importance of networking for individuals seeking the achievement of career goals (Davis et al., 2020; Gibson et al., 2014; Porter & Woo, 2015).

Although research has examined different types of networking behavior and whether networking occurred internal or external to the employing organization (Forret & Dougherty, 2001; Michael & Yukl, 1993; Wolff & Moser, 2009, 2010), previous studies have not examined the relationship between career priorities and how individuals may target their networking behavior. Indeed, Wanberg et al.

[☆] We are grateful for the financial support of this research provided by the William T. and Mary M. McCaffrey Foundation.

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<https://doi.org/10.1016/j.jvb.2022.103764>

Received 21 December 2021; Received in revised form 6 August 2022; Accepted 14 August 2022

Available online 21 August 2022

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(2020) recently lamented that the focus on networking intensity (i.e., frequency or time spent) has led to limited knowledge on networking processes and mechanisms, that is, knowledge on how, where, or with whom people network. In particular, the category of external networking is broad and may refer to networking with contacts in the community, with family and friends, or within a profession.

One of the contemporary models of careers, the Kaleidoscope Career Model (KCM) (Mainiero & Sullivan, 2005), has been used to examine how an individual's career focus evolves over time (Mainiero & Sullivan, 2006). However, the theory has not been examined using longitudinal, quantitative research methods. The purpose of this study is to use the KCM as the theoretical foundation to explore the relationship between an individual's career parameters and networking behavior. Specifically, we examine how an individual's emphasis on authenticity, balance, and challenge influences who (e.g., work colleagues, family members) is likely to be the focus of that individual's networking behavior. In addition, we explore if the parameters of the KCM are related to objective and subjective career success outcomes, and whether networking foci mediate the relationships with career success.

This study contributes to the literature by offering a better understanding of how career parameters influence networking behaviors and career success. It advances theory by being the first longitudinal quantitative study of the KCM and thus on stability and change in KCM parameters and their outcomes. We also contribute to a recent trend to go beyond personality traits as predictors of networking and add to the research on how values or orientations shape networking behaviors (e.g., Gino et al., 2020; Huang, 2016; Kuwabara et al., 2020). Additionally, this study offers practical insights to individuals seeking job changes and to career counselors as they help individuals make decisions to attain their career goals.

1.1. The Kaleidoscope Career Model

Just like a kaleidoscope produces shifting patterns when the tube is rotated and its glass chips fall into new arrangements, the KCM describes how individuals adjust the pattern of their careers by rotating the varied aspects of their lives to arrange their relationships and roles in new ways (Mainiero & Sullivan, 2006). Modifications may occur in response to internal changes, such as those due to maturation and experience, or to external environmental events, such as being laid off or needing to care for children or elderly parents. Individuals evaluate the choices available to determine the best fit among various aspects of their lives such as work demands, constraints, opportunities, relationships, personal values, and interests (Sullivan & Mainiero, 2007).

Similar to how a kaleidoscope uses three mirrors to create infinite patterns, individuals vary their emphasis on any one of three parameters when making decisions, thus creating the kaleidoscope pattern of their career. These three parameters are: (a) authenticity, in which individuals make choices that permit them to be true to themselves; (b) balance, whereby individuals strive to achieve equilibrium between work and nonwork demands (e.g., family, friends, personal interests); and (c) challenge, involving individuals striving for stimulating work (e.g., responsibility, autonomy) and career advancement (Mainiero & Sullivan, 2006; Sullivan et al., 2009).

These three parameters act simultaneously over the life span with the strength of any one parameter to shape a career decision or transition dependent on circumstances and events occurring in people's lives at that particular time. Across the course of the life span, as individuals search for the best fit that matches the character and context of their lives, the kaleidoscope's parameters shift in response, with one parameter moving to the foreground and intensifying as that parameter takes priority at that time. The other two parameters lessen in intensity and recede to the background but are still present and active because all three parameters influence decision-making (Mainiero & Sullivan, 2006; Sullivan et al., 2009). The parameters thus govern how individuals manage their careers and what strategies and behaviors they employ.

The KCM was developed by Mainiero and Sullivan (2006) based on data from five different studies (interviews, focus groups, and three surveys) of over 3000 professionals working in the United States. The basic tenets of the KCM have been supported by other scholars (e.g., Cabrera, 2006; Dabbs et al., 2020; Mutter & Thorn, 2018; Smith-Ruig, 2009). The parameters of the KCM have been used to differentiate the type and timing of global job assignments chosen by managers (Kirk, 2016) and to determine why some faculty members became self-initiated expatriates (Kuzhabekova & Lee, 2018). Scholars have examined the relationship between the KCM parameters and life roles (O'Neill & Jepsen, 2019), and the work-life integration experiences of midcareer professionals (Grady & McCarthy, 2008). Mainiero and Sullivan (2005) applied the KCM to refute the popular press myth that women were leaving the labor force to become permanent stay-at-home moms. O'Connor and Crowley-Henry (2020) questioned the widely held belief that institutional and structural barriers caused the underemployment of skilled migrants, instead finding the majority of skilled migrants they studied made trade-offs to achieve greater balance.

In sum, the KCM has been used to examine career decision-making and behaviors. Although we know that relationships play a vital role in the enactment of careers (cf. Sullivan & Baruch, 2009), the KCM has yet to be applied to studying networking behavior or career success and how these processes unfold over time. Next, we describe research on networking behavior, which is an important goal-directed career strategy to help individuals achieve their objectives (Gibson et al., 2014).

1.2. Research on networking behavior

Networking behavior is defined as "individuals' attempts to develop and maintain relationships with others who have the potential to assist them in their work or career" (Forret & Dougherty, 2001, p. 284). Networking behaviors are related to important career outcomes such as compensation (Blickle et al., 2012; Forret & Dougherty, 2004; Ng & Feldman, 2014a), advancement (Forret & Dougherty, 2004; Wolff & Moser, 2010), and career satisfaction (Forret & Dougherty, 2004; Ng & Feldman, 2014b; Volmer & Wolff, 2018; Wolff & Moser, 2009). Individuals who are better at networking are more likely to receive higher ratings of job performance by

their supervisors (Huang, 2016; Thompson, 2005), perform better in sales (Blickle et al., 2012), and receive greater support from coworkers (Baumeler et al., 2018).

With regard to the call for more research on how, where, and with whom people network (Wanberg et al., 2020), researchers have looked at different types of networking behaviors, but have not established systematic representations of networking targets. For example, Forret and Dougherty (2001) presented five types of networking behaviors that, notably, include some targets, but mixes these with behavioral strategies: maintaining contacts, socializing, getting involved in professional associations, participating in community events, and increasing internal visibility in one's organization. Likewise, scholars (e.g., McCallum et al., 2014; Michael & Yuki, 1993; Wolff & Moser, 2009, 2010) have examined networking based on whether the focus of the networking behavior was internal, with members of one's organization, or external, with individuals outside of one's organization.

Based on the concepts of internal and external networking, Forret and Sullivan (2002) discussed the idea of networking in one's organization, profession, and community in order to develop mutually beneficial relationships with diverse contacts who are unlikely to know one another. Networking within one's organization focuses predominantly on work colleagues and includes involvement in stretch assignments, task forces, committees, and social activities. Networking in one's profession includes collaborating with peers in relevant professional organizations (e.g., Society for Human Resource Management). Networking in one's community includes participation in organizations or events such as service clubs, annual celebrations, or athletic leagues that typically reach beyond an individual's vocational sphere.

Building on Forret and Sullivan (2002) we consider four classes of contacts, that is, contacts with colleagues, within a profession, within the community, and with family and friends, respectively. Previous research has shown the importance of family and friends for achieving work and career objectives. For instance, Wanberg et al. (2000) showed that individuals seeking new jobs often ask family and friends for ideas or advice. Likewise, because individuals have a built-in trust with family and friends, these family and friends may inform individuals who are not even actively seeking a new position of job opportunities that arise (Forret, 2018).

1.3. Development of hypotheses

Scholars hypothesizing how variables change over time must carefully consider theory and past research to decide the timing of data collections when surveying the same sample multiple times. Determining how long it will probably take processes to evolve is not an easy endeavor (Kaurin et al., 2022). For this study, we could not look to prior research for guidance because there are no published longitudinal quantitative studies on the KCM (see review by Sullivan & Carragher, 2022). In addition, time frames of the different processes involved may be heterogeneous (see e.g., Spector, 2019); thus, the present study is in part exploratory. For example, the KCM has been labeled a life span theory, which points to changes taking place over longer periods such as career stages or processes of maturation (e.g., Mainiero & Sullivan, 2006). Yet, changes may also occur in response to unexpected events, such as a layoff or eldercare demands, that may require immediate action and adaptation of how people enact their lives and careers. With regard to our predictors, we sought to examine longer term changes in networking foci and career success that operate on a time frame of years rather than months. For example, people often get raises on an annual basis and salary growth may be more reliably assessed over a span of multiple years. As specific relationships have been found to be stable over several years (see Burt & Merluzzi, 2016, p. 370), we also presume that networking foci, which pertain to social groups, should be even more stable than specific relationships.

In the absence of further substantive guidelines from KCM research, we chose a long time frame (i.e., seven years) to capture a broad range of changes, and examined *prediction* and *change* to account for differences in time frames. Specifically, *prediction* represents the notion that the current pattern of KCM parameters may predict future behavior and outcomes. This essentially follows a classical cause-effect modelling where the magnitude of current KCM parameters affects later outcomes. With regard to the relationship between KCM parameters and networking foci, prediction over long time frames (i.e., seven years in this study) may capture effects of some processes such as experience, socialization, or maturation, and also transitions into another career stage. However, this interval might be too long to capture effects of some events that operate in a shorter time frame, for example, major life and career events (e.g., children, job changes, layoffs) that sometimes occur unexpectedly and require timely adaptation. But these events should be manifest in *changes* of the KCM parameters over time. Methodologically these changes represent synchronous effects that operate on shorter time frames than the chosen lag (see e.g., Cohen et al., 2003; Zapf et al., 1996). In the following sections, we outline our hypotheses on the relationship between authenticity, balance, and challenge with networking foci.

1.4. Authenticity and networking foci

The concept of authenticity, or the focus on being true to oneself, may include the desire to follow one's own path, yearning for spiritual growth, or longing for purpose. As a pivotal life parameter, the emphasis on authenticity can drive individuals to make changes in their lives that create a healthy alignment between their inner values and their behaviors (Mainiero & Sullivan, 2006). To illustrate, to achieve this alignment individuals might participate in volunteer work that permits them to network with individuals external to their current employer, as they participate in service toward a cause they care about deeply (e.g., improving literacy, protecting the environment). We predict that authenticity is associated with a search for like-minded persons, who are more likely found in discretionary settings, where people have more choice with whom to interact.

Research has found that individuals volunteer because of personal values (e.g., altruism, concern for others), religiosity, spirituality (see reviews by Mannino et al., 2011, and Wilson, 2012), or the desire for meaning and purpose (Florian et al., 2019). Individuals whose primary career parameter is authenticity may volunteer within their community to find meaning, align their values and behaviors, or connect with something bigger than themselves (e.g., spirituality). Some support for this notion comes from a study by

Wolff and Moser (2006) who found a positive relationship between individuals' "alternative orientation" (i.e., a value-driven purpose to make the world a better place) and networking. Similarly, Anderson and Moore (1978) found that individuals participate in networking within community organizations to help people, do good works, or develop personally.

In sum, individuals motivated by authenticity may engage in networking with others in their community to bring congruency between their true self and their behaviors. For instance, volunteering within the community may allow individuals to bring their daily activities into alignment with their values and beliefs, permitting them to be authentic. As such, individuals striving to be authentic may be likely to engage in networking behavior with those involved in local community organizations.

Hypothesis 1. The KCM parameter of (a) authenticity and (b) changes in authenticity will be positively related to networking within the local community.

In addition, individuals concentrating on authenticity may choose to engage in networking with individuals in professional organizations, particularly if they feel their career is a calling (Hall, 2005). Professional and trade organizations perform developmental functions for their members. Networking within professional organizations may help individuals gather information, gain experience, and further develop their skillset. It may provide individuals with an excellent source of ideas for growth and advancement as well as social support (Forret & Sullivan, 2002). Moreover, developing contacts in one's profession might improve an individual's ability to move to another employer whose values and mission better match one's own (Mainiero & Sullivan, 2006). Networking within a professional organization may help individuals be true to themselves; they may be able to align their values and beliefs into daily activities in order to achieve authenticity. Hence, it is hypothesized that individuals who are motivated by authenticity will concentrate on networking within professional organizations.

Hypothesis 2. The KCM parameter of (a) authenticity and (b) changes in authenticity will be positively related to networking in one's profession.

1.5. Balance and networking foci

Individuals seeking balance want to be able to devote time to both the work and nonwork aspects of their lives (Mainiero & Sullivan, 2006). Previous studies on networking reported positive spillover into nonwork domains (e.g., Baumeler et al., 2018), but also higher work-family conflict (Wolff & Kim, 2020). Networking foci might shed further light on these mixed findings. In this respect, we propose that people connect to those who are their family, friends, or others in their proximal life sphere. Even those without a spouse or children may have a strong desire for balance; they may wish to spend their time and energies with siblings and friends, they may care for parents or elderly relatives, or may participate in their interests or hobbies. Networking with family and friends is one way of staying in contact and creating closer relationships with these individuals.

Networking with family and friends provides social support and may decrease work-family conflict, i.e., individuals reduce time demands and work stress by allocating more networking behaviors toward spending time with family and friends (Marcinkus et al., 2007). Marcinkus et al. (2007) found that women received a higher level of personal support from family and friends than they did from work-based colleagues. They commented that "work-family balance is a key issue as they [women] deal with the potentially conflicting demands of their careers, children and child care, eldercare, and other personal life issues" (p. 87).

However, balance affects men as well as women (Kim et al., 2018), with studies finding the number of men desiring high-level positions that demand excessive work hours is decreasing (Powell & Butterfield, 2015), while the number of stay-at-home fathers is increasing (Harrington, 2022). Social norms and age may also influence men's attainment of balance. For example, Thrasher et al. (2022) found that younger male managers experienced lower work-life balance than did younger female managers. Because men are socially expected to invest more heavily in work early in their careers, men may have more difficulties integrating work and nonwork roles. Family and friends may help men navigate the difficulties associated with effectively managing work and nonwork responsibilities. Men may also desire the social support gained through networking with family and friends as well as the potential opportunities to receive information about jobs. Considering that a connection with family and friends is important to those seeking balance, it is likely that these individuals will concentrate on networking with family and friends.

Hypothesis 3. The KCM parameter of (a) balance and (b) changes in balance will be positively related to networking with family and friends.

Along with spending time with family and friends to achieve balance in their lives, individuals may choose to be involved in local community organizations, especially those more closely associated with family (e.g., scouting, school board, church groups). Clary et al. (1998) discussed how individuals serving in volunteer activities can fulfill their social needs. The social function of volunteerism provides individuals an opportunity to be involved in activities they consider important while also engaging in networking that may enhance their careers.

Volunteering in community organizations can help create a sense of connection for individuals who may have less interaction with their coworkers because of the growth of telecommuting and virtual teams as well as the increased frequency of movement between employers (Forret & Sullivan, 2002). Individuals interested in balance in their lives may volunteer at community organizations to form relationships (Omoto et al., 2000). For instance, Hibbert et al. (2003) found that the main reason individuals gave for volunteering in community organizations was to meet people and to make friends. Engaging in community activities may also provide a social outlet to individuals who do not have family living nearby. Networking with community members may help individuals develop friendships, provide a sense of connection to those around them, and assist in the achievement of better work/nonwork balance.

Hypothesis 4. The KCM parameter of (a) balance and (b) changes in balance will be positively related to networking within the local community.

1.6. Challenge and networking foci

Among the KCM parameters, challenge exhibits the strongest emphasis on work and thus we expect that networking foci will be in the work sphere. Individuals whose priority is challenge are willing to work longer hours (Mainiero & Sullivan, 2006). They may engage in networking within their employing organization through the acceptance of positions on special task forces, committees, and stretch assignments, which may help increase skills and visibility (Forret & Sullivan, 2002). Such visibility is important to gain access to information and resources not available to others, and enhances an individual's reputation in the organization as a "go-to person." With this enhanced reputation, others perceive the individual as being more powerful and influential (Seibert et al., 2001) and the individual is more likely to advance within the organization (Forret & Dougherty, 2004; Michael & Yukl, 1993; Wolff & Moser, 2010) and obtain pay increases (Forret & Dougherty, 2004; Ng & Feldman, 2014b; Wolff & Moser, 2009).

Participating in organizational social events provides opportunities to meet new colleagues, increases visibility, and offers occasions to ask work colleagues questions that may help in solving problems (Forret & Sullivan, 2002). Attendance at employer celebrations and special events demonstrates caring attitudes about work, commitment to the organization, and an employee's dedication to its success (McCallum et al., 2014; Mowday et al., 1979). For example, McCallum et al. (2014) found that internal networking behaviors were positively related to affective and normative commitment. In sum, individuals who are focused on challenge are likely to participate in networking with their work colleagues.

Hypothesis 5. The KCM parameter of (a) challenge and (b) changes in challenge will be positively related to networking with work colleagues.

Individuals who are focused on challenge may also spend time networking with members of their professional associations. Networking in professional organizations can improve an individual's job performance as one gains information, knowledge, and skills from others (Forret & Sullivan, 2002), and subsequently may result in the receipt of more challenging work assignments. Individuals may seek more challenge by actively participating in the professional association (e.g., holding officer positions) or by connecting with others in their profession with the hope of moving to a position of higher responsibility with another employer. Studies have found that relationships external to one's employer were positively associated with career advancement (e.g., Luthans et al., 1985; Michael & Yukl, 1993; Wolff & Moser, 2010). Thus, networking in professional organizations may help individuals receive the challenge and visibility they seek in their careers.

Hypothesis 6. The KCM parameter of (a) challenge and (b) changes in challenge will be positively related to networking within one's profession.

1.7. KCM and career success

Although no research has examined the relationship between the three KCM parameters and objective and subjective career success, the theoretical conceptualization of the KCM may be used to guide the development of hypotheses on these relationships. As outlined in the section on the KCM, the three parameters shift in response to internal and external changes, with one parameter usually taking priority (Mainiero & Sullivan, 2006). Based upon these priorities, individuals make trade-offs concerning their goals and activities that may affect career outcomes. Drawing from KCM theory (Mainiero & Sullivan, 2006), we suggest those whose priority is challenge, which includes seeking advancement, should have higher salary, promotions, and promotion rates. Because individuals focusing on challenge want to learn and grow (Sullivan et al., 2009), they are likely to seek out training and assignments that enhance their skills and opportunities for advancement. They may postpone having children so they can work longer hours and be assigned to complex but satisfying work projects that will increase their career success. As subjective measures of career success, i.e., career satisfaction, tend to take into account progress on assessments of income, advancement, and skill development (Greenhaus et al., 1990), those whose priority is challenge should also have higher career satisfaction. Given the above, we hypothesize:

Hypothesis 7. The KCM parameter of (a) challenge and (b) changes in challenge will be positively related with both objective and subjective career success outcomes.

According to KCM theory (Mainiero & Sullivan, 2006), individuals whose focus is on achieving an equilibrium between their work and life domains may accept lower levels of challenge to gain greater balance. For example, if a higher-earning spouse needed to relocate for work, the other spouse may quit a fulfilling, high paying, and high potential job, in order to accommodate the move to a new geographic area. Similarly, skilled migrants may downshift their careers sacrificing objective career success in order to gain better work/life balance and opportunities for their children (O'Connor & Crowley-Henry, 2020). In contrast to those whose priority is challenge, individuals emphasizing balance may have lower salaries, promotions, and promotion rates and changes in these outcomes. People who give up their dream job or lower their career aspirations to achieve greater balance may experience more career regrets and less career satisfaction. For instance, Schooreel et al. (2017) reported that individuals whose private lives constrained their career decisions had lower career satisfaction. Likewise, while organizational family-friendly policies are positively related to increased career satisfaction (Ülker & Özdemir, 2021), workers whose employers fail to have such policies may experience reduced satisfaction (Butts et al., 2013; Mainiero & Sullivan, 2006). Hence, we pose:

Hypothesis 8. The KCM parameter of (a) balance and (b) changes in balance will be negatively related with both objective and subjective career success outcomes.

According to the KCM, those whose priority is authenticity are focused on the alignment of their values with their behaviors (Mainiero & Sullivan, 2006). They are more likely to choose work or organizations that permit them to express their true self regardless of whether financial rewards, advancement opportunities, or skill development are high or low (Mainiero & Sullivan, 2006; Sullivan & Carragher, 2022). Individuals striving to enact their personal values may be less concerned with traditional career success measures. Although those seeking authenticity may be more satisfied with their careers because they experience greater fulfillment in their jobs (see also Hall, 2005), a focus on authenticity may introduce additional goals into career decisions that might be unrelated to the work domain (e.g., reducing hunger, spiritual pursuits). Satisfying multiple goals can require trade-offs or acceptable compromises in line with a person's values and therefore lower career satisfaction. As such, we do not hypothesize a relationship between authenticity and career success outcomes.

1.8. Networking foci as mediators

Prior research suggests that networking foci may mediate the relationship between the KCM parameter of challenge and both objective and subjective career success outcomes. In their study on networking benefits obtained from contacts on LinkedIn, Davis et al. (2020) found participants' networking behavior was related to a large number of more immediate outcomes such as information and ideas, work-related assistance, social support, job search assistance, and career sponsorship that could lead to enhanced objective and subjective career outcomes. Volmer and Wolff (2018) examined short-term effects of networking behavior and found that it was related to career satisfaction and other short-term outcomes such as job satisfaction and well-being that could potentially be linked to long-term outcomes. Also, Seibert et al. (2001) showed that access to information, access to resources, and career sponsorship were all positively related to salary, promotions, and career satisfaction.

As indicated in Hypotheses 5 and 6, we expect those individuals whose priority is challenge will participate in more networking behaviors with work colleagues and members of their profession. Both work and professional colleagues are more likely to be able to influence a person's daily activities at work and be in a better position to advocate on one's behalf. Hence, we suggest that networking foci will mediate the relationships between the KCM parameter of challenge and objective and subjective career outcomes.

Hypothesis 9. Networking foci will mediate the relationships between the KCM parameter of challenge and objective and subjective career success outcomes.

2. Method

2.1. Sample and procedure

From the alumni office of a Midwestern university in the U.S, we obtained postal addresses of a random sample of 1000 undergraduate business school alumni who had graduated between 1976 and 2011. In 2012, we mailed surveys (each containing a unique identifying code) to these alumni and up to three reminders to those who had not responded (Dillman et al., 2014). To encourage survey completion, respondents were eligible to win tickets to the university's performing arts series. There were 71 surveys returned as undeliverable. In total, we received 376 surveys for a response rate of 40 %. However, 22 surveys were unusable (e.g., respondents indicated they were retired and chose not to complete the survey, others had too much missing data). Of the remaining 354 respondents, 180 were female (51 %), and 174 were male (49 %). The average age of the respondents was 42 ($SD = 11.75$); 77 % were married and 53 % had at least one child living at home. The majority (94 %) of the respondents were employed. They averaged 19.6 years of full-time work experience ($SD = 11.74$), 9.9 years with their current employer ($SD = 9.33$), and reported working an average of 43.9 h a week ($SD = 12.25$).

Seven years later, in 2019, we contacted the alumni office for a current listing of addresses of the 354 individuals who participated in the first survey. Six of the participants were now deceased. We mailed 348 surveys, again utilizing three reminders. There were 21 surveys returned as undeliverable. We received 173 surveys for a response rate of 53 %. The response rate across both waves was 19 %. Of the 173 respondents, 90 (52 %) were female and 83 (48 %) were male. The average age of the respondents was 49.8 ($SD = 11.62$); 84 % were married and 46 % had at least one child living at home. The majority of the respondents (86 %) were employed. They averaged 26.6 years of full-time work experience ($SD = 11.91$), 12 years with their current employer ($SD = 10.09$), and reported working an average of 42.4 h a week ($SD = 12.09$).

To examine systematic drop out, we regressed a binary variable indicating whether participants responded at T2 or not using logistic regression. We entered a range of family (marital status, number of children living at home), demographic (gender, age, education), job (work hours, organizational tenure), and our substantive predictor variables (see measures section) into the equation. As a variable set, these 15 variables explained an insignificant amount of variance in T2 response, Nagelkerke $R^2 = 0.04$, $\chi^2(15) = 9.75$, $p = .84$. Also, adopting a liberal significance level of $p = .20$ and a Bonferroni correction for multiple tests of 15 variables in one sample, none of the predictor variables were significant. In sum, these procedures showed no evidence of systematic dropout.

For the present analyses of career variables, we excluded retired respondents. As there is no mandatory retirement age in the U.S. and some people move into and out of retirement, we excluded nine individuals who were older than 65 and worked fewer than 20 h per week. The sample sizes for the analyses were 345 for T1 and 166 for T2. We also conducted an outlier analysis for all variables and excluded 10 data points (0.16 % of a total of 6274 data points), because they were more than three standard deviations above or below

their mean.

2.2. Measures

We examined all scales using the larger T1 dataset by means of confirmatory factor analyses (CFA) with a robust ML estimator. We relied upon [Hu and Bentler's \(1999\)](#) recommendations and used the comparative fit index, $CFI \geq 0.95$, and the standardized root mean residual, $SRMR \leq 0.08$, to evaluate model fit.

2.3. Kaleidoscope Career Model

The parameters of authenticity, balance, and challenge were measured using the [Sullivan et al. \(2009\)](#) 15-item KCM scale. Each parameter has five items: authenticity (e.g., "I hope to find a greater purpose to my life that suits who I am"), balance (e.g., "I constantly arrange my work around my family needs"), and challenge (e.g., "I thrive on work challenges and turn work problems into opportunities for change"). Respondents rated each item using a 5-point Likert scale ranging from 1 = *does not describe me at all* to 5 = *describes very well*.

A CFA showed that a 3-factor solution fit the data well ($\chi^2 = 220.89$, $df = 87$, $p < .001$, RMSEA = 0.068, CFI = 0.95, SRMR = 0.071) and also better than a single factor model ($\chi^2 = 1437.09$, $df = 90$, $p = .000$, RMSEA = 0.212, CFI = 0.51, SRMR = 0.18; $\Delta\chi^2 = 1216.20$, $df = 3$, $p < .001$). For both time points, all internal consistencies were satisfactory with $0.71 \leq \alpha \leq 0.87$ (for details see [Table 1](#)).

2.4. Networking foci

We developed four 3-item scales to measure networking with (a) family and friends, (b) contacts in the individual's profession, (c) contacts in the local community, and (d) work colleagues. Note that for the items describing networking with work colleagues, we included "colleagues from current and former employers." Across the focal contacts, items used three identical stems (i.e., "*I frequently participate in activities with members of my profession*," "*I communicate often with members of my profession*," and "*I have an extensive network of contacts in my profession*"). For the item pertaining to participation in activities with work colleagues, we modified the wording slightly to distinguish it from a work assignment, i.e., "*I frequently participate in activities (beyond normal work obligations) with colleagues from current and former employers*." Items were rated using a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

A CFA showed that our hypothesized 4-factor model fit well according to the chosen criteria of $CFI \geq 0.95$ and $SRMR \leq 0.08$, although fit according to the RMSEA was satisfactory at best ($\chi^2 = 231.67$, $df = 48$, $p = .000$, RMSEA = 0.107, CFI = 0.96, SRMR = 0.063). An examination of the modification indices suggested that some variance may be due to the use of identical item stems; however, these are held constant across the four scales and should thus affect all four measures in an identical manner. Internal consistencies for the four scales at both time points were good with $0.81 \leq \alpha \leq 0.88$ (see [Table 1](#)).

2.5. Salary

Respondents were asked to indicate their current annual income (including salary, bonuses, commission, etc.) at both time points. In line with the literature (e.g., [Meara et al., 2020](#); [Wolff & Moser, 2009](#)), the natural log of salary was used in the analyses to accommodate the high skew of this variable.

2.6. Promotions

At both T1 and T2, respondents were asked how many promotions, defined as "any increase in level and/or any significant increase in job responsibilities or job scope," they had received throughout their career (see [Forret & Dougherty, 2004](#); [Ng et al., 2005](#)). Participants responded with a single number of promotions. We excluded promotion values for 29 individuals, because they reported fewer promotions during their career in 2019 than in 2012. This yields a negative number of promotions between 2019 and 2012 and implies that at least one response is erroneous. For the present analyses, we therefore used data on the number of promotions from 132 individuals.

2.7. Promotion rate

We also used an index of relative promotion speed following [Heslin \(2005\)](#) and [Luthans et al. \(1985\)](#). To calculate this index, the number of promotions was divided by years of work experience to obtain a promotion rate per year.

2.8. Career satisfaction

The [Greenhaus et al. \(1990\)](#) career satisfaction scale was used; it is one of the most common measures of subjective career success ([Heslin, 2005](#)) and has a well-defined unidimensional structure (e.g., [Wolff & Moser, 2009](#)). The scale consists of five items (e.g., "I am satisfied with the success I have achieved in my career"). Respondents rated each item using a 5-point Likert scale ranging from 1 =

Table 1
Descriptive statistics and correlations for study variables.

	M	SD	N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
T1 variables:																													
1. Gender	0.51	0.50	343	–																									
2. Age	41.43	11.32	345	–0.04	–																								
3. Authenticity	3.32	0.86	345	0.04	–0.11*	(0.71)																							
4. Balance	3.49	0.95	345	0.06	–0.05	0.30*	0.13*																						
5. Challenge	3.71	0.80	345	–0.02	–0.04	0.23*	0.13*	0.13*	(0.79)																				
6. Salary (log)	11.14	0.69	317	–0.28*	0.37*	–0.14*	0.00	0.20*	–																				
7. Promotions, number	3.76	2.94	310	–0.04	0.42*	–0.11*	0.00	0.14*	0.39*	–																			
8. Promotions, rate	0.29	0.38	310	–0.03	–0.35*	0.05	0.09	0.07	–0.11	0.19*	–																		
9. Career satisfaction	3.49	0.93	345	0.07	0.14*	–0.21*	0.03	0.19*	0.41*	0.26*	–0.01	(0.90)																	
10. NW with family	4.18	0.68	343	0.14*	–0.17*	0.04	0.23*	0.26*	0.01	–0.07	0.07	0.26*	(0.83)																
11. NW in profession	3.49	0.92	345	–0.07	–0.12*	0.03	0.08	0.34*	0.24*	0.10	0.10	0.35*	0.47*	(0.87)															
12. NW in community	3.14	0.98	345	0.03	0.01	0.08	0.13*	0.29*	0.07	0.04	0.03	0.24*	0.47*	0.56*	(0.88)														
13. NW with colleagues	3.46	0.91	345	0.05	–0.18*	0.00	0.12*	0.27*	0.08	0.02	0.07	0.38*	0.44*	0.70*	0.46*	(0.84)													
T2 variables:																													
14. Authenticity	3.26	0.91	166	0.04	0.03	0.51*	0.34*	0.14	–0.05	0.07	–0.06	–0.02	0.07	0.03	0.05	0.03	(0.72)												
15. Balance	3.60	0.99	166	0.04	–0.16*	0.24*	0.60*	–0.01	–0.16*	–0.07	–0.05	–0.01	0.18*	–0.65*	0.02	0.00	0.40*	(0.87)											
16. Challenge	3.73	0.80	166	–0.01	–0.05	0.24*	0.08	0.67*	0.03	0.21*	0.14	0.11	0.25*	0.22*	0.18	0.24*	0.29*	0.05	(0.83)										
17. Salary (log)	11.56	0.71	161	–0.42*	0.07	–0.02	–0.21*	0.20*	0.68*	0.35*	0.19*	0.23*	–0.08	0.22*	0.02	0.10	–0.08	–0.24*	0.21*	–									
18. Promotions, number	4.62	3.09	135	–0.11	0.36*	0.03	0.02	0.27*	0.42*	0.90*	0.35*	0.27*	–0.07	0.16	0.10	0.06	0.04	–0.05	0.29*	0.31*	–								
19. Promotions, rate	0.22	0.15	134	–0.11	–0.31*	0.02	0.05	0.19*	0.04	0.41*	0.69*	0.13	–0.02	0.10	0.03	0.11	–0.06	0.08	0.24*	0.17*	0.62*	–							
20. Career satisfaction	3.84	0.80	165	–0.03	0.08	–0.08	–0.07	0.17*	0.28*	0.24*	0.09	0.57*	0.13*	0.20*	0.12	0.26*	–0.08	–0.01	0.19*	0.35*	0.22*	0.11	(0.91)						
21. NW with family	4.03	0.77	166	0.18*	–0.05	0.04	0.13	0.11	–0.04	–0.05	–0.12	0.16*	0.61*	0.38*	0.45*	0.33*	0.13	0.25*	0.25*	–0.14	–0.04	–0.04	0.14	(0.84)					
22. NW in profession	3.44	0.95	166	–0.06	–0.16*	0.17*	–0.01	0.35*	–0.01	0.16	0.14	0.20*	0.40*	0.59*	0.39*	0.43*	0.12	0.07	0.36*	0.20*	0.21*	0.20*	0.25*	0.46*	(0.88)				
23. NW in community	3.16	0.95	166	0.10	–0.01	0.08	0.06	0.12	–0.02	0.10	–0.13	0.22*	0.40*	0.50*	0.63*	0.39*	0.15*	0.14	0.21*	0.02	0.05	–0.08	0.16*	0.56*	0.49*	(0.88)			
24. NW with colleagues	3.41	0.85	166	0.03	–0.15	0.05	–0.04	0.23*	0.04	0.12	0.14	0.21*	0.34*	0.45*	0.37*	0.51*	0.12	0.02	0.34*	0.21*	0.11	0.12	0.35*	0.41*	0.70*	0.46*	(0.81)		

Note. NW = networking behaviors. Gender was coded 0 = male, 1 = female. Internal consistencies are in parentheses on the diagonal.

* $p < .05$.

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strongly disagree to 5 = strongly agree. Strong internal consistencies were obtained ($\alpha = 0.90$ and $\alpha = 0.91$ at T1 and T2, respectively).

2.9. Analyses and potential alternative explanations

We used OLS regression to examine our hypotheses. To interpret our findings, we adopted [Bosco et al.'s \(2015\)](#) benchmarks of effect sizes. These authors used empirical observation of common effect sizes in applied psychology and suggest medium effect sizes be defined as $0.09 < |r| < 0.26$. Although we rely on standardized regression parameters (i.e., β), they provide a rough guide in benchmarking our findings. As it is difficult to precisely estimate power a priori in a longitudinal design, we conducted a post hoc power analysis. With $\alpha = 0.05$ and a sample size of $N = 166$ in the longitudinal sample, we had power of 0.75 to detect an effect of $\beta = 0.20$.

In the regression analyses, we closely followed approaches described for two-wave data in the literature (e.g., [Cohen et al., 2003](#); [Zapf et al., 1996](#)). Specifically, we used the respective T2 variables as dependent variables and, in the first step, entered the dependent variable measure from T1. This strategy essentially controls for the T1 measure and additional predictor variables can only predict change that occurred after T1 in the dependent variable ([Zapf et al., 1996](#)). In the second step, we entered the T1 measure of the predictor variables, which reflects *prediction* as it temporally precedes the criterion. With the T1 dependent variable also in the equation, inclusion of the T1 predictor variables predicts change in the outcome. However, this predictive effect hinges upon the choice of an adequate time frame for cause-effect relations. In cases with shorter true causal lags, using the T1 predictors may lead to serious underestimation of effects, and a remedy is to include the T2 predictors as indicators of “quick-acting” ([Cohen et al., 2003](#), p. 572) or “synchronous effects” ([Zapf et al., 1996](#), p. 149). Therefore, in a third step, we entered the T2 measure of the predictor variables into the regression equation. This leads to a model where the T2 predictors represent *change* in this variable, because earlier influences are represented in the T1 predictors. In sum, because both the predictor and dependent variables from T1 are in the equation in this third step, we examine how changes in predictor variables affect changes in dependent variables (see [Zapf et al., 1996](#)).

Note that the inclusion of T1 variables into our analyses also controls for a wide range of potential alternative explanations, such as bias due to occasion and stable individual differences ([Zapf et al., 1996](#)). We acknowledge this does not control for non-constant variables (e.g., changes in the number of children or number of work hours). Yet, we think these changes in respondents' living or working conditions do not act as confounders. Rather, the KCM is about evaluation of available options, constraints and opportunities, and may thus also cause such changes in job conditions and other non-constant variables. As such, in the absence of a clear theoretical rationale, we follow [Bernierth and Aguinis \(2016\)](#) and do not use additional control variables.

Furthermore, to alleviate concerns of common source bias, we conducted a CFA with the items of the eight measurement scales from T1, that is, the three KCM scales, the four networking foci scales, and the career satisfaction scale. An 8-factor model fit the data well ($\text{Chi}^2 = 1054.23$, $df = 436$, $p < .001$, $\text{RMSEA} = 0.065$, $\text{CFI} = 0.95$, $\text{SRMR} = 0.066$). All items loaded with $\lambda \geq 0.46$ on their designated factors. We also examined several models with fewer factors. Specifically, we examined the latent correlations between the eight factors and merged those with the highest correlations into a single factor. The models all fit significantly worse than the hypothesized 8-factor model. For example, the best fitting 7-factor model, in which we merged the networking with colleagues and networking in the profession scales ($\rho = 0.81$) into a single factor, fit significantly worse than the hypothesized 8-factor model ($\Delta\text{Chi}^2 = 83.21$, $\Delta df = 7$, $p < .001$).

3. Results

[Table 1](#) shows descriptive statistics, internal consistencies of the scales, and bivariate correlations. Concerning stability and change of the KCM variables, the correlations across T1 and T2 for authenticity ($r = 0.51$, $p < .001$), balance ($r = 0.60$, $p < .001$) and challenge ($r = 0.67$, $p < .001$) represent large effect sizes and are significant. While they approach the range of stabilities reported for personality traits (i.e., around r_{tt} of 0.60 or 0.70, cf. [Roberts & DelVecchio, 2000](#); [Watson, 2004](#)), they do leave room for individual change. The stability of authenticity was significantly lower than that of challenge, with a difference between $r_{\text{authenticity}} = 0.51$ and $r_{\text{challenge}} = 0.67$: $z = 2.30$, $p = .011$. The other stabilities did not significantly differ from each other. In line with our assumptions, networking foci exhibited stability.

[Table 2](#) shows the effects of the KCM parameters on networking foci. As discussed previously, controlling for the dependent variable at T1, the other regression coefficients affect change (i.e., increases and decreases) in the dependent variable. We also distinguish between prediction (i.e., effects of T1 predictors) and change (i.e., effects of T2 predictors controlling for T1 predictors). In most cases adding T2 predictors resulted in a significant increase in explained variance (i.e., ΔR^2), indicating their contribution over and above the T1 predictors.¹ With regard to predictive effects of networking foci (see [Table 2](#), Models 2, 5, 8, and 11), the change in R^2 shows that the three KCM variables together explained between 1 % and 4 % of the variance in networking foci. With regard to change effects of networking foci (see [Table 2](#), Models 3, 6, 9, and 12), the increase in R^2 for the three KCM variables together explained between 3 % and 5 % of the variance in networking foci.

[Hypothesis 1](#) posed that the KCM parameter of (a) authenticity and (b) changes in authenticity will be positively related to networking within the local community. [Table 2](#) shows that authenticity significantly predicted an increase of networking in the local community providing support for [Hypothesis 1\(a\)](#), $\beta = 0.16$, $se = 0.07$, $p = .020$, 95 % CI [0.03, 0.29]. According to [Bosco et al.'s \(2015\)](#)

¹ Note that changes in T1 predictor regression weights when entering T2 predictors are common and most likely indicate regression to the mean or spurious relationships between predictor and criterion at T1 ([Cohen et al., 2003](#)).

Table 2
Regression of networking foci variables on KCM variables.

	Family & Friends			Profession			Local Community			Work Colleagues		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
	β	β	β	β	β	β	β	β	β	β	β	β
T1 variables:												
Family & Friends	0.61**	0.62**	0.58**									
Professional Colleagues				0.59**	0.54**	0.55**						
Local Community							0.63**	0.65**	0.64**			
Work Colleagues										0.51**	0.49**	0.47**
Authenticity		0.03	-0.01		0.12	0.11		0.16*	0.13		0.05	0.00
Balance		0.05	-0.06		-0.04	-0.13		0.01	-0.06		-0.08	-0.14
Challenge		-0.06	-0.19*		0.14*	-0.01		-0.06	-0.15		0.08	-0.08
T2 variables:												
Authenticity			-0.01			-0.04			0.00			0.06
Balance			0.17*			0.16*			0.13			0.07
Challenge			0.24**			0.23**			0.16			0.27**
R ²	0.38**	0.38**	0.43**	0.35**	0.39**	0.43**	0.39**	0.41**	0.44**	0.26**	0.27**	0.33**
ΔR^2		0.01	0.05**		0.04*	0.04*		0.02	0.03		0.02	0.05**

Note. N = 166 for all analyses, except for regressions of family and friends where N = 164. The regression coefficients shown are standardized.

* p < .05.

** p < .01.

Table 3
Regression of career success on KCM variables.

	Salary (log)			Promotions			Promotion rate			Career satisfaction		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
	β	β	β	β	β	β	β	β	β	β	β	β
Salary (log) T1	0.66**	0.71**	0.72**									
Promotions T1				0.90**	0.89**	0.90**						
Promotion rate T1							0.69**	0.67**	0.68**			
Career Sat. T1										0.57**	0.56**	0.57**
Authenticity T1		0.06	0.12		0.02	0.02		-0.02	-0.02		0.04	0.10
Balance T1		-0.14*	-0.09		-0.07	-0.11*		0.02	-0.07		-0.08	-0.11
Challenge T1		0.12	-0.01		0.07	-0.02		0.10	-0.01		0.09	-0.04
Authenticity T2			-0.12			-0.06			-0.10			-0.17*
Balance T2			-0.06			0.09			0.19*			0.12
Challenge T2			0.20*			0.15*			0.20*			0.20*
R ²	0.46**	0.50**	0.52**	0.81**	0.82**	0.83**	0.48**	0.49**	0.53**	0.32**	0.34**	0.37**
ΔR^2		0.03**	0.03		0.01	0.02*		0.01	0.04**		0.02	0.03*
N	153	153	153	132	132	132	131	131	131	165	165	165

Note. The regression coefficients shown are standardized.

* $p < .05$.

** $p < .01$.

benchmark, this represents a medium effect, although the CI indicates that the effect might also fall outside the respective range and constitute a small (i.e., $\beta < 0.09$) or large effect (i.e., $\beta > 0.26$). There was no support for [Hypothesis 1\(b\)](#). Changes in authenticity did not predict changes in networking within the local community, $\beta = 0.00$, $se = 0.08$, $p = .964$, 95 % CI [-0.14, 0.16].

According to [Hypothesis 2](#), the KCM parameter of (a) authenticity and (b) changes in authenticity will be positively related to networking in one's profession. There was no support for either [Hypothesis 2\(a\)](#) or (b). Authenticity did not significantly predict an increase of networking in the profession, $\beta = 0.12$, $se = 0.07$, $p = .071$, 95 % CI [-0.01, 0.25], and changes in authenticity did not predict changes in networking in one's profession, $\beta = -0.04$, $se = 0.08$, $p = .599$, 95 % CI [-0.19, 0.11].

[Hypothesis 3](#) stated that the KCM parameter of (a) balance and (b) changes in balance will be positively related to networking with family and friends. Contrary to expectations, balance was not a significant predictor of networking with family and friends, $\beta = 0.05$, $se = 0.07$, $p = .494$, 95 % CI [-0.08, 0.17], providing no support for [Hypothesis 3\(a\)](#). However, [Hypothesis 3\(b\)](#) was supported. Changes in balance significantly predicted networking with family and friends, $\beta = 0.17$, $se = 0.08$, $p = .035$, 95 % CI [0.01, 0.33]. Again, the effect was of medium size but the confidence interval indicates it may range from a small to large effect.

[Hypothesis 4](#) indicated that the KCM parameter of (a) balance and (b) changes in balance will be positively related to networking within the local community. [Hypothesis 4\(a\)](#) and [4\(b\)](#) received no support. Balance was not related to networking within the local community, $\beta = 0.01$, $se = 0.06$, $p = .826$, 95 % CI [-0.11, 0.14], and changes in balance were not significantly related to networking in the local community, $\beta = 0.13$, $se = 0.08$, $p = .094$, 95 % CI [-0.02, 0.29]. Although not hypothesized, changes in balance did have a significant positive effect on networking in the profession, $\beta = 0.16$, $se = 0.08$, $p = .050$, 95 % CI [0.001, 0.31]. This effect is of medium size, but the CI indicates that it might also be a small or large effect.

[Hypothesis 5](#) proposed that the KCM parameter of (a) challenge and (b) changes in challenge will be positively related to networking with work colleagues. Challenge did not predict networking with work colleagues, $\beta = 0.08$, $se = 0.07$, $p = .255$, 95 % CI [-0.06, 0.23], providing no support for [Hypothesis 5\(a\)](#). However, [Hypothesis 5\(b\)](#) was supported. Changes in challenge led to significant increases in networking with work colleagues, $\beta = 0.27$, $se = 0.09$, $p = .004$, 95 % CI [0.09, 0.45]. Although this is a large effect size, the confidence interval indicates it could be a medium effect.

According to [Hypothesis 6](#), the KCM parameter of (a) challenge and (b) changes in challenge will be positively related to networking within one's profession. [Hypothesis 6\(a\)](#) was supported. Challenge significantly predicted an increase of networking within one's profession, $\beta = 0.14$, $se = 0.07$, $p = .045$, 95 % CI [0.003, 0.27]. The point estimate and the confidence interval indicate a small or medium sized effect. [Hypothesis 6\(b\)](#) was also supported. Changes in challenge led to significant increases in networking within one's profession, $\beta = 0.23$, $se = 0.09$, $p = .007$, 95 % CI [0.06, 0.40], indicating a medium effect size, but with a possible range from small to large. In addition, changes in challenge were also associated with a significant increase in networking with family and friends, $\beta = 0.24$, $se = 0.08$, $p = .007$, 95 % CI [0.07, 0.41]. Again, the effect was medium but the CI indicated the effect size may range from small to large. Looking at the results for the first six hypotheses overall, changes in challenge had broad effects on changes in networking foci, changes in balance resulted in more specific changes, and changes in authenticity were unrelated to changes in networking foci.

Next, we explored the relationships between the KCM parameters with objective and subjective career success. With regard to predictive effects of KCM variables on career outcomes (see [Table 3](#), Models 2, 5, 8, and 11), as a set, the KCM variables explained between 1 % and 3 % of the variance in the respective career outcomes. With regard to changes in KCM variables on career outcomes (see [Table 3](#), Models 3, 6, 9, and 12), the KCM variables explained between 2 % and 4 % of the change in career outcomes.

[Hypothesis 7](#) proposed that the KCM parameter of (a) challenge and (b) changes in challenge will be positively related with both objective and subjective career success outcomes. There was no support for [Hypothesis 7\(a\)](#). Challenge was not a significant predictor of salary (log), promotions, promotion rate, or career satisfaction. However, results showed strong support for [Hypothesis 7\(b\)](#). Changes in challenge were significantly and positively related to increases in all career outcomes: salary (log), $\beta = 0.20$, $se = 0.08$, $p = .016$, 95 % CI [0.04, 0.35]; promotions, $\beta = 0.15$, $se = 0.05$, $p = .026$, 95 % CI [0.05, 0.25]; promotion rate, $\beta = 0.20$, $se = 0.09$, $p = .027$, 95 % CI [0.02, 0.37], and career satisfaction, $\beta = 0.20$, $se = 0.09$, $p = .030$, 95 % CI [0.02, 0.38]. The results were all of medium effect size, but the confidence interval indicated they could also be small or large effects.

According to [Hypothesis 8](#), the KCM parameter of (a) balance and (b) changes in balance will be negatively related with both objective and subjective career success outcomes. [Hypothesis 8\(a\)](#) received limited support. Balance was a significant negative predictor of salary (log), $\beta = -0.14$, $se = 0.06$, $p = .021$, 95 % CI [-0.26, -0.02], that is, a stronger focus on balance led to a lower salary and the effect was medium in size. However, balance was not a significant predictor of promotions, promotion rate, or career satisfaction. Surprisingly, and in contrast to expectations, changes in balance led to a significant increase in promotion rate, $\beta = 0.19$, $se = 0.08$, $p = .022$, 95 % CI [0.03, 0.34], but was unrelated to salary, promotions, or career satisfaction. Hence, results showed no support for [Hypothesis 8\(b\)](#), which predicted negative relationships between balance and career outcomes.

Although there was no hypothesis for authenticity, we examined whether relationships existed with the career success outcome measures. Authenticity did not significantly predict any of the career outcomes. However, changes in authenticity did exert a significant negative effect on career satisfaction only, $\beta = -0.17$, $se = 0.08$, $p = .036$, 95 % CI [-0.33, -0.01]. The effect size was medium, but again the confidence interval indicates a range from small to large.

In our investigation of [Hypothesis 9](#), that networking foci will mediate the relationships between the KCM parameter of challenge and objective and subjective career success outcomes, we found two significant mediating effects. Networking with work colleagues mediated the effects of challenge on salary (log), indirect effect estimate = 0.05, bootstrapped 95 % CI [0.01, 0.11], and on career satisfaction, indirect effect estimate = 0.07, bootstrapped 95 % CI [0.02, 0.14], providing partial support for [Hypothesis 9](#). Because this research was exploratory since the relationships between the KCM parameters and career success outcomes had not been tested previously, we also investigated whether the networking foci mediated relationships between the parameters of authenticity and balance and the career success outcomes. There were no significant effects. In sum, while we found some mediation for challenge via

networking with work colleagues, there was no evidence for authenticity and balance.

4. Discussion

Networking behavior has been shown to be related to important career outcomes such as compensation, promotions, and career satisfaction (Forret & Dougherty, 2004; Luthans et al., 1985; Ng & Feldman, 2014a, 2014b; Wolff & Moser, 2009, 2010), yet relatively little is known about how career priorities may influence an individual's networking efforts. This study extends previous research by using a longitudinal design to examine the unexplored relationship between the three KCM parameters (authenticity, balance, and challenge) and where individuals target their networking behaviors. Overall, the significant relationships between career values and networking behaviors provide evidence for the goal-directedness of networking (e.g., Gibson et al., 2014).

We found different patterns with regard to prediction and change that may represent different time frames for effects of the KCM parameters. Given that stabilities of the KCM parameters are in the range of personality variables, our choice of a longer time frame appears reasonable to detect changes in KCM variables over time. However, not all processes may need seven years to unfold and thus prediction is not always a viable assumption. Those processes with shorter time frames are captured by our change models. Depending on the velocity of such processes, they may become evident in either prediction or change models. Based upon this reasoning, processes related to authenticity, for which we found predictive effects, but no change effects, may need longer to evolve. We assume this is due to the firm grounding of authenticity in individuals' core values. With regard to balance where we only found change effects, processes might act much more quickly when potentially unexpected external circumstances (e.g., new job for spouse, need to care for elders) may require immediate adaptation. On the other hand, challenge might be linked to processes of different velocities. Because challenge captures the core occupational processes of the KCM model, there may be more linkages between this work-related concept and the work-related outcomes we examined (i.e., networking, career success).

Based upon previous writings on community volunteerism (Mannino et al., 2011; Wilson, 2012), we expected to find a positive relationship between authenticity and networking within the local community. While authenticity did significantly predict an increase of networking in the local community, changes in authenticity did not predict networking in the local community or any of the other networking foci. As mentioned in the previous paragraph, this predictive effect may indicate slower processes for authenticity. In line with our hypotheses, people who prioritize authenticity may search for persons in their community who share similar interests or values, such as spirituality, a sustainable lifestyle, or literacy, and look broadly for others who share their interests. This corroborates Wolff and Moser's (2006) finding that values beyond those related to work (i.e., challenge, getting ahead) may fuel people's networking activities.

Although there were no predictive effects of networking foci for balance, changes in balance were related to a significant increase in networking with family and friends and networking in the profession. As noted above, this pattern might indicate that most processes affecting balance may work on shorter time frames than the seven years we examined. These findings were in line with expectations because networking with family and friends provides social support and helps reduce stress related to work-family conflict (Marcinkus et al., 2007). This balance, according to Sullivan and Mainiero (2007), helps create a coherent whole between work and nonwork aspects of life. Individuals may also engage in networking with family and friends as well as within their profession in order to find new jobs that provide them with greater balance. It should be noted that we did not examine the extent to which individuals discussed work (or thought about work) while networking with their family and friends. Future research examining the degree to which individuals integrate or segment their work roles with nonwork domains would be beneficial as a blurring of these boundaries can lead to role conflict (Olson-Buchanan & Boswell, 2006).

Challenge significantly predicted networking in the profession and changes in challenge led to significant increases in networking in the profession, networking with work colleagues, and networking with family and friends. Interacting with professionals who are external to one's employer provides new sources of contacts and information, especially from people who are from different functions and have different expertise. Networking within one's profession has been linked to improvement in job performance (Forret & Sullivan, 2002), and can lead to better job opportunities with other employers. Moreover, involvement in professional organizations may increase visibility and reputation at one's employer such that an individual might be perceived as having higher potential (Forret & Dougherty, 2004).

Furthermore, the creation of a strong internal network of work colleagues helps an individual gain access to information and resources (Gibson et al., 2014; Seibert et al., 2001) and increases an individual's chances of completing difficult work tasks. Internal networking is generally associated with positive career outcomes (Forret & Dougherty, 2004; Michael & Yukl, 1993; Wolff & Moser, 2009, 2010). Also, networking with family and friends continues to be a rich source of new job leads appealing to those looking for greater challenge (Forret, 2018). Taken together, our findings show that individuals focused on challenge direct their networking behaviors more widely to reach individuals in multiple, diverse areas. Our results are consistent with findings by Wolff et al. (2018) who found that those with higher needs for achievement (who strive for high performance and career success) participated more extensively in both internal and external networking behaviors.

Regarding career outcomes, this longitudinal study shows that KCM parameters are associated with some career success measures. We think this is notable, given that the KCM focuses upon embedding experiences from the work domain into an individual's broader life experiences. The KCM was not specifically designed to explain "traditional" career outcomes such as salary or promotions, but in spite of its breadth and ability to capture many non-standard career experiences or patterns (e.g., opting out), there were still significant relationships with some of the traditional career success measures.

Most importantly, changes in challenge were significantly related to increases in salary (log), promotions, promotion rate, and career satisfaction. Those focused on challenge are interested in obtaining stimulating work assignments that offer opportunities for

learning and growth that should positively impact career satisfaction. Those who perform effectively and achieve goals are more likely to be promoted and earn salary increases, which also should result in higher career satisfaction. Our findings support the results of [Koekemoer and Crafford's \(2019\)](#) qualitative study of the KCM and subjective career success. They found that the 24 Gen Y information technology employees defined success in terms of growth, development, and the achievement of goals, including promotions. Furthermore, our exploratory mediation analysis showed the importance of networking foci for those focused on challenge. Networking with work colleagues mediated the relationship between the parameter of challenge and both salary and career satisfaction outcomes.

As anticipated, an emphasis on balance negatively predicted salary. [Mainiero and Sullivan \(2006\)](#) discussed the trade-offs that individuals make in the workplace (e.g., working fewer hours, taking a less demanding job, relocating for a spouse) in an attempt to allocate more time and energy toward their families or other outside work responsibilities. We were surprised, however, that changes in balance led to a significant increase in promotion rate. One potential explanation can be gleaned from [Greenhaus and Powell \(2006\)](#). They contend that instead of experiencing conflict between work and life domains, work and life domains may actually enrich each other. In other words, resources generated in the life domain may be applied in the work domain to increase work outcomes. It may be that changes in balance contributed to increases in promotion rates because seeking work-life equilibrium reduced stress and enhanced well-being, providing individuals with additional resources to be used to enhance job performance. Future research is necessary to further corroborate our theorizing on this unexpected finding.

Changes in authenticity exerted a significant negative effect on changes in career satisfaction. Changes in authenticity may decrease career satisfaction because individuals realize their career is unfolding in a manner inconsistent with their vision and values. Their career may not accurately reflect their authentic self. Multiple constraints, perhaps due to lack of necessary education or expertise, limited opportunities in their geographical region, or obligations to their families may prevent individuals from realizing their dreams.

4.1. Study limitations

Although the results of this study add to a better understanding of the KCM and networking behavior, the findings must be considered in light of the study's limitations. First, data were collected from a single source. Scholars conducting future research on these variables may consider gathering information on people's networking behavior from multiple sources, such as work colleagues, managers, and other associates. Second, although a longitudinal design was used, data were collected seven years apart so short-term changes may not have been fully captured. For example, the influence of positive and negative "jolts" (e.g., unexpected promotion, layoff, geographic movement due to transfer of spouse) may have lessened over time. As several effects occurred predominantly in change parameters of our models, we recommend shorter time frames be used in future research. Annual or semi-annual collection of data over many years may be necessary to capture changes soon after such events have occurred and help determine how long jolts influence career outcomes. Third, data were collected from highly educated individuals in the U.S. Findings may not generalize to individuals who are less educated or come from a different country context.

Finally, as noted by a reviewer, we do not take generational differences into account that have been reported by others (e.g., [Sullivan et al., 2009](#)). As generation (i.e., year of birth) is a stable individual characteristic, our inclusion of T1 predictors controls for generation main effects, and our effects do not confound generation differences. In a post hoc analysis we conducted with T1 data, a MANOVA examining the KCM parameters and networking foci variables by generation, i.e., Baby Boomers ($n = 112$), Gen X ($n = 179$), and Gen Y ($n = 52$) found a significant multivariate effect of generation. Subsequent ANOVAs to examine the univariate effects showed that (a) Gen X was significantly higher on balance than Baby Boomers, and (b) Gen Y was significantly higher on both authenticity and networking with work colleagues than Baby Boomers and Gen X. Given our limited sample size, we had insufficient power to examine longitudinal or moderating effects of generation. Future research with larger samples would be beneficial. Given the individualized nature of authenticity, it is more difficult for employers to build it into reward systems or benefit plans, and may pose difficulties in attracting and retaining members of Gen Y.

4.2. Directions for future research

Based on this study's findings, we recommend two major directions for future research. First, future studies should explore the KCM's fundamental premise that careers are linked to other life domains. For example, while this study found that authenticity and balance did not predict career satisfaction, these parameters may be more closely linked to life satisfaction because it covers a broader domain range than career satisfaction. In addition, although we did not examine the specific form of authenticity that individuals sought, future studies should. Spiritual pursuits, involvement in environmental or human rights issues, or other specific interests might produce different outcomes that our measures did not capture.

Second, scholars should examine the interplay between the COVID-19 pandemic's effect on careers and individuals' desire for authenticity, balance, and challenge. [Mainiero and Sullivan's \(2005\)](#) early research dispelled the myth that women were permanently opting out of the labor force to care for children. Instead, they found many women left corporations because of discrimination, lack of support, and inflexible work environments; these women chose to start their own businesses or seek employment better suited to their needs. Concerns about women permanently opting out have risen again due to the pandemic. A recent survey reported 25 % of women, compared to 20 % of men, were considering downshifting their careers or leaving the labor force, with women in senior management, working mothers, and Black women being especially affected ([McKinsey & Company, 2020](#)). In addition, more women than men lost jobs during the pandemic ([Connely, 2021](#)). How the pandemic has influenced individuals' KCM parameters, networking foci, career success outcomes, and career decisions (e.g., become an entrepreneur, leave an unsupportive employer) are areas ripe for further study.

4.3. Implications for theory

This study has three implications for KCM theory. First, this study provides quantitative support for one of the basic tenets of the KCM, namely that the KCM's three parameters shift over an individual's life and these changes influence important career outcomes. While most qualitative studies use retrospective narratives, our use of a longitudinal research design permitted us to examine this key component of the KCM within individuals and in a prospective manner. This further strengthens the theoretical foundation of the KCM. Future longitudinal research should explore what individual and contextual factors may influence the timing of these changes. Second, even though KCM parameters do change, we also found substantial stability of them. We believe the levels of change and stability reported here may well account for meaningful change across the life span, without being in constant, unpredictable flux. Interestingly, the stability of authenticity was somewhat lower here and future research might examine this finding. Taken together, stability and change offer some guidance on the timing of multiple data collections in order to capture changes in the KCM parameters. Third, our findings demonstrate the relevance of the KCM for the study of objective and subjective career success measures and networking behavior. Our results also illustrate the value of testing more complex mediation models when examining relationships between the KCM parameters, networking behavior, and career outcomes.

With regard to networking, our research provides evidence for the value of examining not only how much, but also with whom (i.e., in terms of social groups), people network. Going beyond the prior distinction of internal and external networking, we identified several external foci and enlarged the focus on networking with groups of individuals who may not be considered "typical" networking contacts (e.g., family and friends). Our results provide evidence that networking is driven by values and career priorities. People not only use networking to advance their careers, but also use networking to secure other resources to obtain balance or possibly authenticity. Given the broader focus of the KCM, we recommend further examination of how individuals who prioritize balance or authenticity go about networking with others to achieve their goals.

4.4. Implications for practice

First, managers should be concerned with providing sufficient challenge to their employees. Individuals whose desire for challenge is not being met by their current employer may use networking behaviors to learn of other job opportunities and eventually accept positions in other organizations. Managers must consider ways to provide individuals with work challenges, whether it be through the use of job enrichment, job rotation, stretch assignments, or the involvement in meaningful project work. Likewise, managers can make use of flexible work schedules, telecommuting, and other strategies to assist those employees seeking greater balance between work and nonwork aspects of their lives. By offering employees intra-organizational means of fulfilling their parameters of challenge and balance, employers are more likely to retain valuable employees who may otherwise use networking to seek employment elsewhere.

Second, an understanding of the KCM may help career counselors better guide their clients as they work toward enhancing both their networking behaviors and their authenticity, balance, and challenge. The KCM has successfully been used as a tool for career coaching and to help individuals make career choices (e.g., Carraher et al., 2014; Tajlili, 2014). Career counselors may assist individuals by directing their networking efforts to fulfill the KCM parameter that is the current focus. For example, if challenge is the priority, career counselors can suggest ways to engage in networking with work colleagues (e.g., volunteering for special assignments) and members of their profession (e.g., taking an active role in a professional organization).

5. Conclusion

Individuals in today's dynamic, global work environment are likely to need assistance from a variety of people to accomplish job tasks, transition within and between organizations, and adapt to rapid technological changes. This study is the first to explore relationships between career parameters and targets of networking behavior, in support of assertions that networking is goal-directed behavior (Gibson et al., 2014). Moreover, to our knowledge, this is the first quantitative study to examine changes in the KCM parameters using a longitudinal design. The findings suggest individuals may be able to create challenge in their careers by networking with different groups of individuals. To obtain balance, it is particularly helpful for individuals to be networking with family and friends. However, networking behavior did not appear to help individuals obtain authenticity, suggesting that assistance of professional career and life counselors may be especially useful. Overall, we hope the results of this study encourage greater research into the relationship between the parameters of the KCM and networking behaviors.

CRedit authorship contribution statement

John Simmons: Conceptualization, Project administration, Methodology, Resources, Investigation, Writing – original draft. **Hans-Georg Wolff:** Conceptualization, Methodology, Visualization, Formal analysis, Writing – original draft. **Monica L. Forret:** Conceptualization, Project administration, Supervision, Investigation, Writing – review & editing. **Sherry E. Sullivan:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing.

Declaration of competing interest

We have no conflicts of interests. Declaration of interests is none.

References

- Adler, L. (2016, February 26). *New survey reveals 85% of all jobs are filled via networking*. LinkedIn. <https://www.linkedin.com/pulse/new-survey-reveals-85-all-jobs-filled-via-networking-lou-adler>.
- Anderson, J. C., & Moore, L. F. (1978). The motivation to volunteer. *Journal of Voluntary Action Research*, 7(3–4), 120–129. <https://doi.org/10.1177/089976407800700312>
- Baruch, Y., Altman, Y., & Tung, R. (2016). Career mobility in a global era: Advances in managing expatriation and repatriation. *Academy of Management Annals*, 10(1), 841–889. <https://doi.org/10.5465/19416520.2016.1162013>
- Baruch, Y., & Rousseau, D. M. (2019). Integrating psychological contracts and ecosystems in career studies and management. *Academy of Management Annals*, 13(1), 84–111. <https://doi.org/10.5465/annals.2016.0103>
- Baumeler, F., Johnston, C. S., Hirschi, A., & Spurk, D. (2018). Networking as predictor of work-nonwork enrichment: Mechanisms on the within- and between-person level. *Journal of Vocational Behavior*, 109, 166–177. <https://doi.org/10.1016/j.jvb.2018.10.015>
- Bernerth, J. B., & Aguinis, H. (2016). A critical review and best practice recommendations for control variable usage. *Personnel Psychology*, 69(1), 229–283. <https://doi.org/10.1111/peps.12103>
- Blickle, G., John, J., Ferris, G. R., Liu, Y., Haag, R., Meyer, G., Weber, K., & Oerder, K. (2012). Fit of political skill to the work context: A two-study investigation. *Applied Psychology: An International Review*, 61(2), 295–322. <https://doi.org/10.1111/j.1464-0597.2011.00469.x>
- Bosco, F. A., Aguinis, H., Singh, K., Field, J. G., & Pierce, C. A. (2015). Correlational effect size benchmarks. *Journal of Applied Psychology*, 100(2), 431–449. <https://doi.org/10.1037/a0038047>
- Briscoe, J. P., Hall, D. T., & Fratusch DeMuth, R. L. (2006). Protean and boundaryless careers: An empirical exploration. *Journal of Vocational Behavior*, 69(1), 30–47. <https://doi.org/10.1016/j.jvb.2005.09.003>
- Burt, R. S., & Merluzzi, J. (2016). Network oscillation. *Academy of Management Discoveries*, 2(4), 368–391. <https://doi.org/10.5465/amd.2015.0108>
- Butts, M. M., Casper, W. J., & Yang, T. S. (2013). How important are work-family support policies? A meta-analytic investigation of their effects on employee outcomes. *Journal of Applied Psychology*, 98(1), 1–25. <https://doi.org/10.1037/a0030389>
- Cabrera, E. F. (2006). Opting out and opting in: Understanding the complexities of women's career transitions. *Career Development International*, 12(3), 218–237. <https://doi.org/10.1108/13620430710745872>
- Carraher, S. M., Crocitto, M. M., & Sullivan, S. E. (2014). A kaleidoscope career perspective on faculty sabbaticals. *Career Development International*, 19(3), 295–313. <https://doi.org/10.1108/CDI-04-2013-0051>
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74(6), 1516–1530. <https://doi.org/10.1037/0022-3514.74.6.1516>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Lawrence Erlbaum.
- Connely, C. (2021, January 21). *Coronavirus job losses are impacting everyone, but women are taking a harder hit than men*. CNBC. <https://www.cnbc.com/2020/05/14/coronavirus-job-losses-disproportionately-impact-women.html>.
- Dabbs, S. M., Graham, J. A., & Dixon, M. A. (2020). Extending the kaleidoscope career model: Understanding career needs of midcareer elite head coaches. *Journal of Sport Management*, 34(6), 554–567. <https://doi.org/10.1123/jsm.2019-0417>
- Davis, J., Wolff, H.-G., Forret, M. L., & Sullivan, S. E. (2020). Networking via LinkedIn: An examination of usage and career benefits. *Journal of Vocational Behavior*, 118, Article 130396. <https://doi.org/10.1016/j.jvb.2020.103396>
- Dillman, D. R., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys*. Wiley.
- Fisher, J. F. (2019, December 27). *How to get a job often comes down to one elite personal asset, and many people still don't realize it*. CNBC. <https://www.cnbc.com/2019/12/27/how-to-get-a-job-often-comes-down-to-one-elite-personal-asset.html>.
- Florian, M., Costas, J., & Kärreman, D. (2019). Struggling with meaningfulness when context shifts: Volunteer work in a German refugee shelter. *Journal of Management Studies*, 56(3), 589–616. <https://doi.org/10.1111/joms.12410>
- Forret, M. L. (2018). Networking as a job search behavior and career management strategy. In U.-C. Klehe, & E. A. J. van Hooft (Eds.), *The Oxford handbook of job loss and job search* (pp. 257–292). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199764921.013.022>.
- Forret, M. L., & Dougherty, T. W. (2001). Correlates of networking behavior for managerial and professional employees. *Group and Organization Management*, 26(3), 283–311. <https://doi.org/10.1177/1059601101263004>
- Forret, M. L., & Dougherty, T. W. (2004). Networking behaviors and career outcomes: Differences for men and women? *Journal of Organizational Behavior*, 25(3), 419–437. <https://doi.org/10.1002/job.253>
- Forret, M. L., & Sullivan, S. E. (2002). A balanced scorecard approach to networking: A guide to successfully navigating career changes. *Organizational Dynamics*, 31(3), 245–258. [https://doi.org/10.1016/S0090-2616\(02\)00112-2](https://doi.org/10.1016/S0090-2616(02)00112-2)
- Gibson, C., Hardy, J. H. I., & Buckley, R. M. (2014). Understanding the role of networking in organizations. *Career Development International*, 19(2), 146–161. <https://doi.org/10.1108/CDI-09-2013-0111>
- Gino, F., Kouchaki, M., & Casciaro, T. (2020). Why connect? Moral consequences of networking with a promotion or prevention focus. *Journal of Personality and Social Psychology*, 119(6), 1221. <https://psycnet.apa.org/doi/10.1037/pspa0000226>.
- Grady, G., & McCarthy, A. M. (2008). Work-life integration: Experiences of mid-career professional working mothers. *Journal of Managerial Psychology*, 23(5), 599–622. <https://doi.org/10.1108/02683940810884559>
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64–86. <https://doi.org/10.2307/256352>
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31(1), 72–92. <https://doi.org/10.5465/amr.2006.19379625>
- Guan, Y., Arthur, M. B., Khapova, S. N., Hall, R. J., & Lord, R. G. (2019). Career boundarylessness and career success: A review, integration and guide to future research. *Journal of Vocational Behavior*, 110, 390–402. <https://doi.org/10.1016/j.jvb.2018.05.013>
- Hall, D. T. (2005). Psychological success: When the career is a calling. *Journal of Organizational Behavior*, 26, 155–176. <https://doi.org/10.1002/job.301>
- Hall, D. T., Yip, J., & Doiron, K. (2018). Protean careers at work: Self direction and value orientation in psychological success. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 129–156. <https://doi.org/10.1146/annurev-orgpsych-032117-104631>
- Harrington, B. (2022). The new dad: The career-caregiving conundrum. In M. Grau, M. Maestro, & H. Bowles (Eds.), *Engaged fatherhood for men, families and gender equality* (pp. 197–212). Springer.
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior*, 26(2), 113–136. <https://doi.org/10.1002/job.270>
- Hibbert, S., Piacentini, M., & Al Dajani, H. (2003). Understanding volunteer motivation for participation in a community-based food cooperative. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 30–42. <https://doi.org/10.1002/nvsm.199>
- Hirschi, A., & Koen, J. (2021). Contemporary career orientations and career self-management: A review and integration. *Journal of Vocational Behavior*, 126, Article 103505. <https://doi.org/10.1016/j.jvb.2020.103505>
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Huang, Y. M. (2016). Networking behavior: From goal orientation to promotability. *Personnel Review*, 45(5), 907–927. <https://doi.org/10.1108/PR-03-2014-0062>
- Kaurin, A., King, K. M., & Wright, A. G. (2022, February 10). *Studying personality pathology with ecological momentary assessment: Harmonizing theory and method*. <https://doi.org/10.31234/osf.io/chszq>
- Kim, S. Y., Fouad, N., & Lee, J. (2018). The roles of work and family in men's lives: Testing the social cognitive model of career self-management. *Journal of Vocational Behavior*, 106, 153–164. <https://doi.org/10.1016/j.jvb.2018.01.008>

- Kirk, S. (2016). Career capital in global kaleidoscope careers: The role of HRM. *The International Journal of Human Resource Management*, 27(6), 681–697. <https://doi.org/10.1080/09585192.2015.1042896>
- Koekemoer, E., & Crafford, A. (2019). Exploring subjective career success using the kaleidoscope career model. *South African Journal of Industrial Psychology*, 45(1), 1–11. <https://doi.org/10.4102/sajip.v45i0.1638>
- Kuwabara, K., Zou, X., Aven, B., Hildebrand, C. A., & Iyengar, S. (2020). Lay theories of networking ability: Beliefs that inhibit instrumental networking. *Social Networks*, 62, 1–11. <https://doi.org/10.1016/j.socnet.2020.01.003>
- Kuzhabekova, A., & Lee, J. (2018). Relocation decision of international faculty in Kazakhstan. *Journal of Studies in International Education*, 22(5), 414–433. <https://doi.org/10.1177/1028315318773147>
- Luthans, F., Rosenkrantz, S. A., & Hennessey, H. W. (1985). What do successful managers really do? An observation study of managerial activities. *Journal of Applied Behavioral Science*, 21(3), 255–270. <https://doi.org/10.1177/002188638502100303>
- Mainiero, L. A., & Sullivan, S. E. (2005). Kaleidoscope career: An alternate explanation for the “opt-out” revolution. *Academy of Management Executive*, 19(1), 106–123. <https://doi.org/10.5465/ame.2005.15841962>
- Mainiero, L. A., & Sullivan, S. E. (2006). *The opt-out revolt: Why people are leaving companies to create kaleidoscope careers*. Davis-Black.
- Mannino, C. A., Snyder, M., & Omoto, A. M. (2011). Why do people get involved? Motivations for volunteerism and other forms of social action. In D. A. Dunning (Ed.), *Social motivation* (pp. 27–146). Psychology Press.
- Marcinkus, W. C., Whelan-Berry, K. S., & Gordon, J. R. (2007). The relationship of social support to the work-family balance and work outcomes of midlife women. *Women in Management Review*, 22(2), 86–111. <https://doi.org/10.1108/09649420710732060>
- McCallum, S. Y., Forret, M. L., & Wolff, H.-G. (2014). Internal and external networking behavior: An investigation of relationships with affective, continuance, and normative commitment. *Career Development International*, 19(5), 595–614. <https://doi.org/10.1108/CDI-08-2013-0101>
- McKinsey, & Company. (2020). Seven charts that show COVID-19's impact on women's employment. <https://www.mckinsey.com/featured-insights/diversity-and-inclusion/seven-charts-that-show-covid-19s-impact-on-womens-employment>.
- Meara, K., Pastore, F., & Webster, A. (2020). The gender pay gap in the USA: A matching study. *Journal of Population Economics*, 33(1), 271–305. <https://doi.org/10.1007/s00148-019-00743-8>
- Michael, J., & Yukl, G. (1993). Managerial level and subunit function as determinants of networking behavior in organizations. *Group and Organization Management*, 18(3), 328–351. <https://doi.org/10.1177/1059601193183005>
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). *The measurement of organizational commitment*. Elsevier.
- Mutter, J., & Thorn, K. (2018). Women's careers: Navigating with a kaleidoscope. *New Zealand Journal of Human Resources Management*, 18(2), 33–42.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58(2), 367–408. <https://doi.org/10.1111/j.1744-6570.2005.00515.x>
- Ng, T. W. H., & Feldman, D. C. (2014a). A conservation of resources perspective on career hurdles and salary attainment. *Journal of Vocational Behavior*, 85(1), 156–168. <https://doi.org/10.1016/j.jvb.2014.05.008>
- Ng, T. W. H., & Feldman, D. C. (2014b). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, 85(2), 169–179. <https://doi.org/10.1016/j.jvb.2014.06.001>
- O'Connor, E. P., & Crowley-Henry, M. (2020). From home to host: The instrumental kaleidoscopic careers of skilled migrants. *Human Relations*, 73(2), 262–287. <https://doi.org/10.1177/0018726719828452>
- O'Neill, M. S., & Jepsen, D. (2019). Women's desire for the kaleidoscope of authenticity, balance and challenge: A multi-method study of female health workers' careers. *Gender, Work & Organization*, 26(7), 962–982. <https://doi.org/10.1111/gwao.12317>
- Olson-Buchanan, J. B., & Boswell, W. R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and nonwork. *Journal of Vocational Behavior*, 68(3), 432–445. <https://doi.org/10.1016/j.jvb.2005.10.006>
- Omoto, A. M., Snyder, M., & Martino, S. C. (2000). Volunteerism and the life course: Investigating age-related agendas for action. *Basic and Applied Social Psychology*, 22(3), 181–197. https://doi.org/10.1207/S15324834BASP2203_6
- Porter, C. M., & Woo, S. E. (2015). Untangling the networking phenomenon: A dynamic psychological perspective on how and why people network. *Journal of Management*, 41(5), 1477–1500. <https://doi.org/10.1177/0149206315582247>
- Powell, G. N., & Butterfield, D. A. (2015). The glass ceiling: What have we learned 20 years on? *Journal of Organizational Effectiveness: People and Performance*, 2(4), 306–326. <https://doi.org/10.1108/JOEPP-09-2015-0032>
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, 126(1), 3–25. <https://doi.org/10.1037/0033-2909.126.1.3>
- Schooreel, T., Shockley, K., & Verbruggen, M. (2017). What if people's private life constrained their career decisions? Examining the relationship between home-to-career interference and career satisfaction. *Career Development International*, 22(2), 124–141. <https://doi.org/10.1108/CDI-03-2016-0037>
- Seaman, A. (2020, August 24). *Shining a light on the hidden job market*. LinkedIn. <https://www.linkedin.com/pulse/shining-light-hidden-job-market-andrew-seaman/>.
- Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44(2), 219–237. <https://doi.org/10.2307/3069452>
- Smith-Ruig, T. (2009). Mapping the career journey of accountants in Australia. In S. G. Baugh, & S. E. Sullivan (Eds.), *Research in careers* (pp. 163–196). Information Age Publishing.
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business & Psychology*, 34(2), 125–137. <https://doi.org/10.1007/s10869-018-09613-8>
- Sullivan, S. E., & Al Ariss, A. (2021). Making sense of different perspectives on career transitions: A review and agenda for future research. *Human Resource Management Review*, 31(1), 1–17. <https://doi.org/10.1016/j.hrmr.2019.100727>
- Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management*, 35(6), 1542–1571. <https://doi.org/10.1177/0149206309350082>
- Sullivan, S. E., & Carraher, S. M. (2022). The kaleidoscope career model. In *Oxford research encyclopedia of business and management*. <https://doi.org/10.1093/acrefore/9780190224851.013.328>
- Sullivan, S. E., Forret, M. L., Carraher, S. M., & Mainiero, L. A. (2009). Using the kaleidoscope career model to examine generational differences in work attitudes. *Career Development International*, 14(3), 284–302. <https://doi.org/10.1108/13620430910966442>
- Sullivan, S. E., & Mainiero, L. A. (2007). The changing nature of gender roles, alpha/beta careers and work-life issues: Theory-driven implications for human resource management. *Career Development International*, 12(3), 238–263. <https://doi.org/10.1108/13620430710745881>
- Tajlili, M. H. (2014). A framework for promoting women's career intentionality and work-life integration. *Career Development Quarterly*, 62(3), 254–267. <https://doi.org/10.1002/j.2161-0045.2014.00083.x>
- Thompson, J. A. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology*, 90(5), 1011–1017. <https://doi.org/10.1037/0021-9010.90.5.1011>
- Thrasher, G. R., Wynne, K., Baltés, B., & Bramble, R. (2022). The intersectional effect of age and gender on the work-life balance of managers. *Journal of Managerial Psychology*. <https://doi.org/10.1108/JMP-03-2021-0169>. Advanced online publication.
- Ülker, F. E., & Özdemir, G. (2021). The effect of family-friendly policies on career and life satisfaction: A research on cooperative and bank employees. *Journal of Administrative Services*, 19(42), 867–890. <https://doi.org/10.35408/comuybd.785027>.
- Volmer, J., & Wolff, H.-G. (2018). A daily diary study on the consequences of networking on employees' career-related outcomes: The mediating role of positive affect. *Frontiers in Psychology*, 9, 2129. <https://doi.org/10.3389/fpsyg.2018.02179>
- Wanberg, C. R., Kanfer, R., & Banas, G. T. (2000). Predictors and outcomes of networking intensity among unemployed job seekers. *Journal of Applied Psychology*, 85(4), 491–503. <https://doi.org/10.1037/0021-9010.85.4.401>

- Wanberg, C. R., van Hoof, E. A. J., Liu, S., & Csilac, B. (2020). Can job seekers achieve more through networking? The role of networking intensity, self-efficacy, and proximal benefits. *Personnel Psychology*, 73(4), 559–585. <https://doi.org/10.1111/peps.12380>
- Watson, D. (2004). Stability versus change, dependability versus error: Issues in the assessment of personality over time. *Journal of Research in Personality*, 38(4), 319–350. <https://doi.org/10.1016/j.jrp.2004.03.001>
- Wilson, J. (2012). Volunteerism research: A review essay. *Nonprofit and Voluntary Sector Quarterly*, 41(2), 176–212. <https://doi.org/10.1177/0899764011434558>
- Wolff, H.-G., & Kim, S. (2020). Beyond career success: An examination of the costs of networking on work and nonwork domains. *Career Development International*, 25(5), 501–516. <https://doi.org/10.1108/CDI-09-2019-0213>
- Wolff, H.-G., & Moser, K. (2006). Entwicklung und validierung einer networkingskala [Development and validation of a networking scale]. *Diagnostica*, 52(4), 161–180. <https://doi.org/10.1026/0012-1924.52.4.161>
- Wolff, H.-G., & Moser, K. (2009). Effects of networking on career success: A longitudinal study. *Journal of Applied Psychology*, 94(1), 196–206. <https://doi.org/10.1037/a0013350>
- Wolff, H.-G., & Moser, K. (2010). Do specific types of networking predict specific mobility outcomes? A two-year prospective study. *Journal of Vocational Behavior*, 77(2), 238–245. <https://doi.org/10.1016/j.jvb.2010.03.001>
- Wolff, H.-G., Weikamp, J. G., & Batinic, B. (2018). Implicit motives as determinants of networking behaviors. *Frontiers in Psychology*, 9(411). <https://doi.org/10.3389/fpsyg.2018.00411>
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: A review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1(2), 145–169. <https://psycnet.apa.org/doi/10.1037/1076-8998.1.2.145>.