The Role of Personality in Employee Developmental Networks

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WASHBURN UNIVERSITY
SCHOOL OF BUSINESS
WORKING PAPER SERIES
Number 90

August 2007

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Paper prepared for the Fall 2007 Research Seminar Series
Washburn University School of Business
Tuesday, September 4th

Abstract

Keywords: Personality, Mentoring, Developmental Relationships, Social Networks

Conceptual paper

Purpose
To integrate scholarship on personality, mentoring, developmental relationships, and social networks in delineating how employees with particular personality characteristics are more or less likely to be involved in four types of developmental networks.

Design
We review scholarship on personality characteristics, mentoring, and developmental relationships to identify a set of distinct personality characteristics proposed to be related to employees' tendencies to develop four types of developmental networks. These network types are defined based on high or low relationship strength and high or low relationship diversity in employee ties with others. We develop propositions delineating the nature of expected relationships of these personality characteristics with developmental network types.

Findings
We identified six personality characteristics—interdependent/independent self-construal, core self-evaluations, openness to experience, conscientiousness, extroversion/introversion, and temporal depth—and explained how each should be related to employees' tendencies to develop the four types of developmental networks. These networks have been described as opportunistic, entrepreneurial, receptive, and traditional developmental networks, based upon the *strength* and the *diversity* of network relationships.

Value
Our work suggests that personality variables are potentially valuable for understanding how individuals develop particular types of developmental relationships, an area that deserves more research attention. We note that developmental relationships have been shown to be related to both employees' objective career outcomes such as promotions and salary progress, and subjective outcomes such as career and job satisfaction.

The Role of Personality in Employee Developmental Networks

Over more than two decades, scholars have investigated how mentoring and other "developmental relationships" are relevant to employees' personal and work lives (see Wanberg, Welsh & Hazlett, 2003, for a comprehensive review). Mentoring has most often been defined as an interpersonal exchange between a more senior, experienced person (the mentor) and a less experienced employee (the protégé) in which the mentor provides various kinds of advice, counseling, coaching, and career support (Kram, 1985). The benefits of mentoring for employees have been well-documented. For example, research consistently demonstrates that mentoring relationships are related to employees' objective outcomes such as promotions and salary progress, and subjective outcomes such as career satisfaction, job satisfaction, and organizational commitment (Dougherty & Dreher, in press).

However, there has also been an increasing recognition that traditional mentoring relationships represent just one component of a much broader constellation of developmental relationships involving assistance received from peers, subordinates, supervisors, and others in one's social network (Higgins & Kram, 2001; Higgins, Chandler & Kram, in press). This paper further develops previous work integrating scholarship on mentoring, other developmental relationships, and social networks. We seek to provide further delineation and make a contribution to theory about the origin of particular types of developmental networks. We believe that individual differences, in particular personality characteristics, influence employees' development of four types of developmental networks originally suggested by Higgins and Kram (2001). Our intent is

to explore the role of personality in the formation of developmental network structures, and to stimulate thinking and future research in this area.

As recently pointed out by Turban and Lee (in press), research on personality in organizations has been increasingly popular in recent years, especially because of work related to the Five Factor Model (FFM) of personality, a comprehensive framework for organizing personality traits (see Digman, 1996). Personality has been conceptualized as "The complex organization of cognitions, affects, and behaviors that gives direction and pattern (coherence) to the person's life" (Pervin, 1996, p.414). Personality researchers typically distinguish a *trait*, considered to be relatively stable, from a *state*, which is more transient (John & Srivastava, 1999). Turban and Lee (in press) noted that relatively few studies have focused on the role of personality in mentoring and other developmental relationships, an area that deserves more research attention (see their chapter for a review). We propose that personality variables are also potentially valuable for understanding why individuals develop particular *types* of developmental networks, a topic to which we turn next.

Developmental Network Structures: Network Diversity and Tie Strength

Higgins and Kram (2001) integrated work on social networks with work on mentoring to generate a typology of developmental relationships. Arguing that a developmental network is a subset of one's entire social network, they defined developmental network as relationships a protégé cites as being important to his or her career development at a specific point in time. The basis of this typology is two core concepts from social networks theory—*network diversity* and *tie strength.* Network diversity represents the extent to which one's network provides information that is similar

or redundant. They chose the *range* of one's relationships to represent network diversity. Their example of a high-range developmental network is a protégé with one developer (network contact) from an employer, another from school, another from a professional association, and a fourth from a community organization. In contrast, a protégé with four ties all from the same social system (e.g. school) would have a low-range developmental network.

The second core concept in the typology of developmental relationships is tie strength. Higgins and Kram (2001) referred to Granovetter's (1973) seminal work in defining relationship (tie) strength as the level of "emotional affect, reciprocity, and frequency of communication" with those in the developmental network (p. 269). They also pointed out that strong ties involve bonds with one's network characterized by considerable interdependence and reciprocity, and a high level of motivation of network members to help each other.

Based upon the two core concepts of developmental relationship diversity and developmental relationship strength, Higgins and Kram (2001) generated four categories of developmental networks: (1) *entrepreneurial networks*, which reflect both strong ties and a high range of relationships; (2) *opportunistic networks*, which reflect weak ties and a high range of relationships; (3) *traditional networks*, reflecting strong ties along with a low range of relationships; and (4) *receptive networks*, reflecting both weak ties and a low range of relationships.

Entrepreneurial developmental networks include both strong ties and a wide-ranging network. Strong ties provide advantages in that individuals in the network tend to trust each other and are motivated to act on a focal person's behalf. In contrast, the

value of a wide-ranging, diverse network stems from the bridging of unconnected clusters of people, thus providing the focal person with access to different sources of information. In this vein, Burt (1992) found that individuals with social networks characterized by these "structural holes" can benefit by acting as brokers between otherwise unconnected parties. In summary, individuals with entrepreneurial networks benefit from having developers who are motivated to help them and who also tend to provide access to a wide array of information.

Opportunistic developmental networks are characterized by weaker ties along with a high range of relationships. In these networks, focal persons do not actively seek help and cultivate relationships, although they may receive help when offered or occasionally ask for help. There is less reciprocation of help, and thus less development of strong relationships. These networks are opportunistic in that individuals are open to receiving developmental assistance from multiple sources, while taking a mostly passive approach toward cultivating these relationships.

Traditional developmental networks tend to involve individuals having strong ties to a small number of developers (low range). As delineated by Higgins and Kram (2001), a prototypical case would be an individual with a strong-tie relationship to a primary developer in a relationship of trust, respect, and sharing. The focal person may have one or more relatively strong additional relationships with others from the same social context (e.g. employer), who are likely to be connected to each other. This type of developmental network is similar to the traditional view of mentoring.

Finally, *receptive developmental networks* include a small number of weak-tie developmental relationships from the same social system (low range). Members of this

type of network would be likely to know each other, but because of weaker ties would behave in less of a "clique-like" way, compared to traditional developmental networks. The focal person is likely to receive similar information from the developers, but does not receive as strong a level of support as do focal persons in traditional networks. In summary, in receptive networks, focal persons tend to receive consistent but relatively weak support.

Higgins and Kram (2001) presented an overall conceptual framework in which they suggested key antecedents. mediating and moderating processes leading to developmental network structures, and also consequences of these structures for protégés. The major classes of antecedent variables were (1) work environment influences and (2) individual-level influences—including personality, demographic factors, and perceived needs for development. In this paper we provide a more in-depth exploration of *personality characteristics* we believe to be related to the types of network structures employees develop. Next, we discuss these ideas about particular personality traits and their linkages to the four types of networks. Our discussion includes research propositions.

Personality Characteristics and Developmental Network Structures

Many personality characteristics might possibly influence individuals' forming of particular types of developmental networks. But we believe the key characteristics are those influencing perceptions of and reactions to one's social environment. Therefore, characteristics we chose appear to be especially relevant as indicators of individuals' tendencies to seek strong or weak ties and wide-ranging and diverse or less diverse relationships. More specifically, we chose personality characteristics that appear to first,

represent individuals' tendencies to be proactive (or not proactive) in seeking numerous interactions with a diverse set of others in their work environment. Second, we chose characteristics that appear to be indicators of individuals' orientation (or lack of orientation) toward seeking close, supportive, trusting relationship with other people. Using this rationale, the personality characteristics we discuss include interdependent/independent self-construal, core self-evaluations, openness to experience, conscientiousness, extroversion/introversion, and temporal depth.

Self-construal and developmental networks

Self-construal is a characteristic rooted in the coexisting human needs for autonomy and belongingness and varies considerably both between and within cultures (Gardner, Gabriel, & Lee, 1999). Self-construal is a reflection of what individuals believe about their relations with others. People with an *independent self-construal* see themselves as stable and separate from others, whereas those with an *interdependent self-construal* see themselves as flexible, context-dependent, and connected with others (Markus & Kitayama, 1991).

Analyzing the shaping of self-construal, Markus and Kitayama (1994) maintained that the core values, cultural ideas, and socio-economic factors comprising each individual's "collective reality" are transmitted over and over again through factors such as customs, norms, practices, and institutions, and are experienced in the "individual reality"—that is, everyday life. As a result of these repetitive experiences requiring individuals to respond in a socially appropriate manner, they develop particular cognitions, emotions, and motivations, labeled "habitual psychological tendencies." These psychological tendencies further shape individual actions resulting in behaviors

that could include work and interpersonal tendencies to prefer certain types of developmental networks.

Research suggests that the behavior of people who have constructed an interdependent self-construal is a consequence of their being responsive to role obligations in their relationships. For example, interdependent self-construal has been linked to perspective-taking and motivation to listen (Markus & Kitayama, 1991; Sheldon & Johnson, 1993). People with an interdependent self-construal are also motivated by belongingness and friendship (Gardner, Gabriel, & Lee, 1999), pursuing the goals of those close to them (Markus & Kitayama, 1991). They engage in a wide variety of behaviors as a function of what they believe others want (Trafimow & Finlay, 1996), sometimes sacrificing personal goals to maintain relationships with others.

Thus, people who have constructed an interdependent self-construal are motivated to search for support, guidance, and signs of approval or disapproval from others, while being open to others' ideas, perspectives, and requests. What matters most to them is to maintain durable and generous relationships allowing them to consult their partners repeatedly. As a result, they are likely to value *strong ties* to others, and especially to those who offer advice and opinions, clarify role requirements, and set expectations. Therefore, these individuals would prefer entrepreneurial and traditional networks, the two types of developmental networks that reflect strong ties.

Proposition 1a: Individuals with an interdependent self-construal seek strong ties with others, and therefore tend to form entrepreneurial (high strength-high diversity) and traditional (high strength-low diversity) networks.

At the opposite end of the self-construal continuum, those with an independent self-construal make self-reliant choices and judgments and value personal freedom and distinctiveness from others (Cross & Madson, 1997). Motivated by the need for autonomy rather than belongingness, they are driven by the promotion of their own goals and egocentric desires.

Building on these research findings, we suggest that people who tend toward an independent self-construal are less likely than those with interdependent self-construal to reach out for support from others in accomplishing tasks. An independent self-construal results in less responsiveness to role obligations than an interdependent self-construal, and an unwillingness to sacrifice one's own goals in order to pursue the goals of others. These individuals have less concern with fitting in and less motivation to seek support and guidance, compared to an interdependent self-construal. They tend to be nonconformists, indifferent to advice and opinions from others, and, correspondingly would tend to form weak ties with others. They would be inclined to form opportunistic and receptive networks, the two types of developmental networks reflecting weaker ties. *Proposition 1b: Individuals with an independent self-construal seek weak ties with others, and therefore tend to develop opportunistic (low strength-high diversity) and receptive (low strength-low diversity) networks.*

Self-construal is not only a relatively stable individual difference, but may also be situationally-primed (Markus & Kitayama, 1991). That is, some contexts may increase or decrease the salience of individuals'self-construal, making them more interdependent or more independent. Supporting this view, Singelis (1994) proposed that situations involving competition prime the independent self, while situations involving cooperation

and mutual support may prime the interdependent self. This competition-cooperation contextual distinction should have consequences for individuals' developmental networks.

For example, people with an interdependent self-construal (who tend to seek strong ties) may seek to increase their developmental network *diversity* (e.g. seek entrepreneurial versus traditional networks) under *cooperative* conditions—conditions priming the interdependent self. In contrast, those with an independent self-construal (who tend to seek weaker ties) may also seek to increase their developmental network diversity (e.g. opportunistic versus receptive networks), but under *competitive* conditions. This is because a competitive environment is likely to lead people with an independent self-construal to recognize the importance of relationships that could assist them in competing for access to valuable, often scarce, resources. Therefore, to enhance personal outcomes in a competitive environment, people with an independent self-construal may diversify their relationships, albeit at the "cost" of increasing their dependence on others. Pruitt and Kimmel's (1977) goal-expectation theory of individual cooperation – which assumes that all persons are ultimately individualists, trying to maximize their own benefits--suggests that the tendency to seek more diverse relationships follows a two-step process. First, these people naturally develop defensive motives. Then, they act on these motives toward increased cooperation through the diversification of relationships. Such an act is enhanced to the degree to which these people are stimulated into examining their experiences (Pruitt & Kimmel, 1977). Competitive conditions may be exactly the type of stimulus evoking this introspection.

Proposition 2a: When perceiving a cooperative work environment, individuals with an interdependent self-construal favor entrepreneurial developmental networks (high strength-high diversity) and are less likely to seek traditional (high strength-low diversity) developmental networks.

Proposition 2b: When perceiving a competitive work environment, individuals with an independent self-construal favor opportunistic developmental networks (low strength-high diversity) and are less likely to seek receptive (low strength-low diversity) developmental networks.

Core self-evaluations

Core self-evaluations as a personality characteristic represents the fundamental assumptions individuals hold about themselves, other people, and the world. Individuals who score high on core self-evaluations have a more positive self-concept (Judge, Locke, & Durham, 1997). Core self-evaluations is a higher order personality trait that encompasses four lower order traits: self-esteem, generalized self-efficacy, locus of control, and neuroticism (Judge, Erez, Bono, & Thoresen, 2002). Self-esteem refers to individuals' appraisal of their self-worth and self-acceptance. Generalized self-efficacy represents individuals' estimates of their capabilities to cope with events in their lives. Locus of control is the extent to which individuals' believe that they have control over events in their lives. Neuroticism, also known as emotional stability, is the tendency to feel insecure, anxious, and depressed (Goldberg, 1992).

In general, individuals who have high core self-evaluations tend to have (1) higher levels of self-worth; (2) more capability to mobilize their motivation, cognitive resources, and actions needed to exercise control over their life events; (3) an internal

locus of control; and (4) the tendency to feel secure, calm, and happy (Judge et al., 1997). Research on core self-evaluations has linked the trait to job satisfaction, job performance (Judge & Bono, 2001), life satisfaction (Judge, Locke, Durham, & Kluger, 1998), and motivation (Erez & Judge, 2001). In addition, recent research indicates that these linkages may be applicable to cultures in regions other than North America, such as Japan and Israel (Judge et al., 1998; Piccolo, Judge, Takahashi, Watanabe, & Locke, 2005). Individuals with high core self-evaluations are motivated to take an active role in engaging in activities that contribute to positive career outcomes, such as seeking feedback and engaging in developmental relationships (Bono & Colbert, 2005; Turban & Dougherty, 1994). It follows that these feelings of being competent, empowered, and confident enable individuals to reach out to a greater range of people in initiating developmental relationships.

As developmental resources may not be readily available in the immediate work environment, individuals often need to reach out to people outside of their own work group or organization to obtain developmental interactions. Although Ibarra (1995) found that minorities were more likely to have developers outside of their own business units or companies, extra-organizational developmental relationships are not limited to minorities. It appears that individuals in general benefit from developing extra-organizational developmental relationships (Thomas & Higgins, 1996). Because individuals with high core self-evaluations are known to be more capable of coping with a changing environment (Judge, Thoresen, Pucik, & Welbourne, 1999), they would be more willing to and capable of developing and managing developmental relationships with individuals of diverse backgrounds, resulting in a high diversity of developmental

relationships. Furthermore, people with high core self-evaluations maintain positive perceptions of their capabilities to mobilize cognitive/motivational resources and take actions to control their relationships with others. As a result, they should be more capable of developing different levels of interpersonal closeness (e.g. tie strength) with their developers. Given their tendency to develop diverse relationships, and also their capability to develop different levels of interpersonal closeness, individuals with high core self-evaluations would be likely to develop networks high in diversity, and networks either high and low in relationship strength--entrepreneurial and opportunistic networks. *Proposition 3a: Individuals with high core self-evaluations seek a diversity of relationships and therefore tend to form entrepreneurial (high strength-high diversity) and opportunistic (low strength-high diversity) networks.*

Conversely, individuals low in core self-evaluations tend to focus on the "negatives" of events, a tendency that may spill over to their views about interpersonal relationships (Judge, Erez, & Bono, 1998). Because of their more external locus of control, they are likely to believe that developmental opportunities are granted by others and not created by themselves. They may also feel restrained from taking risks in committing themselves to relationships. As a result, they are more likely to attach themselves with strong ties to a few developers they think are especially likely to help them. In addition, their lower self-esteem and generalized self-efficacy may make them likely to seek protection instead of handling challenging or uncertain situations themselves. When involved in resolving problems and dealing with challenges, they are likely to require considerable persuasion and guidance from their developers (Bandura, 1986). Such inclinations would make those with low core self-evaluations develop and

maintain strong ties because of their needs for role modeling, guidance, and acceptance from their mentors and other developers (Kram, 1985). This seeking of strong ties to a few individuals (low diversity) suggests a tendency toward traditional developmental networks.

Proposition 3b: Individuals with low core self-evaluations seek a limited number of strong ties and therefore tend to form traditional (high strength-low diversity) networks.

Openness to experience

Openness to experience is one of the personality factors in the Five Factor Model (Costa & McCrae, 1992). Individuals high in openness to experience tend to be more imaginative, curious, unconventional, original, and broad-minded (McCrae, 1987; Goldberg, 1992). According to Fitzgerald (1966), openness to experience is "the disposition to greet novel and unusual experiences" (p. 656) without repression. Due to their curiosity and desire to seek novel experiences, those who are open to experience are more motivated to explore opportunities to acquire new and diverse information and experience (McCrae & Costa, 1997).

Building developmental networks is one avenue for exposing oneself to new ideas, information, and experiences (Burt, 1992; 2004). Indeed, previous research has suggested that openness to experience is related to training effectiveness and to building personal networks with individuals both inside and outside organizations (Barrick & Mount, 1991; Guthrie, Coate, & Schwoerer, 1998). Because of their tendency to seek out novel experiences, these individuals are more likely to meet with various types of people and learn from them. Therefore, individuals high in openness to experience will be

inclined to build developmental relationships with developers from diverse backgrounds and status levels.

Individuals also sometimes need to *redefine* the nature of their ties in their developmental networks. Higgins and Kram (2001) noted that developers are people protégés regard as being important to career development at a particular point in time. The perception of who is important may depend on whether the protégé is able to see the relevance of his or her developers' inputs (i.e., knowledge, information, and experience). Individuals high in openness to experience will be more capable of maintaining old ties and establishing new ties because of their greater (1) identity flexibility (Whitbourne, 1986) and (2) divergent thinking abilities (McCrae, 1987).

Identity flexibility refers to the readiness for present and future identity changes (Grotevant, Thorbecke, & Meyer, 1982). Identities stem from various entities both within and outside one's organization, and from one's profession (Ashforth & Mael, 1989; Johnson, Morgeson, Ilgen, Meyer, & Lloyd, 2006). As individuals progress in their careers, they not only acquire new identities but also change the relative salience of their identities (Ashforth and Johnson, 2001). Being flexible in switching and managing identities, individuals high in openness are more likely to embrace new identities and maintain old identities at the same time. They appreciate the value of developmental resources offered by both new and old developers. For example, a recent college graduate may seek career advice from his or her supervisor (i.e., new developer in the same work unit) as well as a past college professor (i.e., old developer from outside organization) instead of relying entirely on the current supervisor. This broad-mindedness may reduce the "obsolescence rate" of old developmental relationships.

Divergent thinking refers to the ability to make associations and generate new ideas from old information (Guilford, 1967). Research has suggested that openness to experience is associated with divergent thinking abilities (McCrae, 1987). Individuals high in openness to experience can readily associate the information and ideas obtained from a diversity of old and new ties to generate new ideas. This quality is especially important when the existing developers cannot provide direct, relevant developmental resources to deal with new situations or problems. An example would be developmental assistance for dealing with a career transition during the process of an organization's merger/acquisition (Fugate, Kinicki, & Scheck, 2002). Divergent thinking allows individuals high in openness to experience to recognize the relevance of their developers' unique perspectives (Parker & Axtell, 2001), resulting in formation of network types high in diversity--entrepreneurial and opportunistic networks.

Proposition 4: Individuals high in openness to experience are oriented toward a diversity of relationships and therefore tend to form entrepreneurial (high strength-high diversity) and opportunistic (low strength-high diversity) networks.

Conscientiousness

Conscientiousness is another Big Five personality trait. Individuals high in conscientiousness tend to be organized, task-focused, and persistent (Costa & McCrae, 1992; Goldberg, 1992; Mount & Barrick, 1995). Research on the relationship between conscientiousness and job performance suggests that conscientious people are high in achievement striving, dependability, volition, competence, and self-discipline (Barrick & Mount, 1991; Thoresen, Bradley, Bliese, & Thoresen, 2004; Waung & Brice, 1998).

Highly conscientious employees will be more strategic in selecting the people with whom they network. Being achievement-striving and task-focused, conscientious individuals are likely to select for their developmental network those who have access to critical developmental resources (Podolny & Baron, 1997). Developmental resources that facilitate career advancement—such as sponsorship and the giving of strategic information—are often in scarce supply and held by a few high status, powerful individuals. These resources are likely to be provided only to protégés who have established strong ties with the powerful, senior individuals. Conscientious individuals are likely to be more motivated than others to develop strong developmental ties with powerful, high status developers.

In addition, conscientious individuals are more likely to recognize the information and task benefits of establishing and maintaining developmental ties with a diversity of individuals. Previous research suggested that having access to a variety of information is beneficial to one's career advancement (Burt, 1992; Granovetter, 1995; Seibert, Kraimer, & Liden, 2001). In addition, Morrison (2002) found that the degree of organizational learning of newcomers was related to their network diversity. This is because developers reflecting different organizational affiliations, functional backgrounds, and status levels have access to different information and resources. Although establishing developmental ties with a diversity of developers may require greater effort, conscientious individuals, because of their persistence and focus, are motivated to establish and cultivate developmental relationships with individuals from diverse backgrounds. In summary, highly conscientious individuals would be expected to seek both strong ties and a diverse group of developers in their network, as reflected in entrepreneurial networks.

Proposition 5: Individuals high in conscientiousness seek both strong and diverse ties with others and therefore tend to form entrepreneurial (high strength-high diversity) networks.

Extroversion/introversion

Extraversion/introversion, another Big Five personality dimension, pertains to the individuals' tendency to seek out and enjoy social interaction and exchange, reflecting the degree to which individuals feel comfortable in social situations (Lucas & Diener, 2003). At one end of the extraversion continuum extraverts are considered to be talkative, sociable, active, and facile in social situations. In contrast, introverts appear quiet, retiring, less interpersonally effective and more socially aloof (John & Srivastava, 1999).

In a longitudinal job-search study, Wanberg and Kammeyer-Mueller (2000) found that extraversion is related to proactive socialization behavior, whereas Watson and Clark (1997) noted that extraverts spend more time with other persons and can derive greater reinforcement from their social interactions. Extraversion has also been found to be related to seeking social support in coping with stressful events (Watson & Hubard, 1996). Extraverts are consistently described as person-oriented, whereas introverts are referred to as task and thought-oriented.

Based on the distinction between person-oriented extraverts and task-oriented introverts, it is likely that extraverts are more concerned about social interaction and exchange, and both establishing and nurturing personal relationships. Compared to introverts, extraverts interact with more people and span multiple groups. They are likely to develop numerous and diverse social interactions from which they derive not only the

fulfillment of their social needs, but also sources of support such as guidance and developmental opportunities. Consequently, extroverts would be expected to be especially oriented toward seeking a diversity of ties in their developmental networks, and thus develop entrepreneurial and opportunistic networks, both of which reflect high relationship diversity.

Proposition 6a: Extraverts seek diverse ties with other people and therefore tend to form entrepreneurial (high strength-high diversity) and opportunistic (low strength-high diversity) developmental networks.

While the research findings discussed above suggest that introverts (as task-oriented people) may confine themselves to fewer interacting partners, it may also be true that introverts (who also are thought-oriented people) are more introspective and less impulsive than extraverts. Several findings suggest such a possibility. For instance, Watson and Clark (1997) included in their integrative model of extraversion construct a "venturesomeness" component that reflects individual differences in boldness and adventurousness. They suggested that, unlike extraverts, introverts do not necessarily search for variety in their lives and do not necessarily become dissatisfied when variety is absent.

Considering previous research, introverts would be expected to be careful, persistent, and thorough when managing the fewer and less diverse relationships they have. Therefore, we propose that it is not that introverts do not need social interaction, but instead that they do not need as much social interaction as extraverts. Still, introverts search for strong, durable, and persistent relations. Therefore, the defining parameter of

the developmental networks of introverts is tie strength, but not relationship diversity—traditional networks.

Proposition 6b: Introverts seek strong and less diverse ties with other people and therefore tend to form traditional (high strength, low diversity) developmental networks.

Previous research supports the observation that both situational factors and individual differences in interaction can determine certain behavioral responses, such as the involvement in developmental networks. Consistent with this suggestion, Barrick and Mount (1991) indicated that extraversion is expected to relate to behavior only in the presence of relevant situational demands. Their empirical findings specifically linked extraversion to job performance in competitive environments, where one can acquire and maintain status. In competitive environments the access to valuable resources is likely to be limited. The involvement in both strong-tie *and* diverse developmental networks is likely to help extraverts secure their access to these resources. This would lead them to form entrepreneurial networks.

Proposition 7: The more competitive the environment, the more extraverts seek strong and diverse ties with other people and the more likely they are to form entrepreneurial (high strength-high diversity) developmental networks as opposed to opportunistic (low strength-high diversity) networks.

Temporal depth

Individuals' temporal depth represents the final personality characteristic we discuss as potentially relevant for understanding the formation of different types of developmental networks. Bluedorn (2002) explained that individuals tend to focus on the past, present, or future in general, and that *temporal depth* refers to "how far" into the

past or future people and think about things. We believe that temporal depth is relevant for the types of developmental networks formed by employees.

Temporal depth is defined as "the temporal distances into the past and future that individuals and collectivities typically consider when contemplating events that have happened, may have happened, or may happen (Bluedorn, 2002, p. 114)". Temporal depth has been linked to both life stress and the ability to detect patterns. More specifically, entrepreneurs' "future temporal depth" has been found to be negatively correlated with their life stress, such that the less the temporal depth, the higher the general life stress (Bluedorn & Martin, in press). El Sawy (1983) and Bluedorn (2002) found positive relationships between the length of past and future temporal depths, suggesting that thinking about things further into the past may lead to thinking about things further into the future.

It is likely that the individuals' temporal depth has a direct effect on the distance in time that these individuals contemplate when making connections with others. More specifically, the greater the individuals' temporal depth, the older the events that they would contemplate along with the newer events, and the more distant their future expectations when forming developmental networks. In contrast, we would expect that those with less temporal depth contemplate more recent events and to use a shorter-term time frame for their expectations. Therefore, individuals with less temporal depth are likely to remember, contemplate, and give consideration to fewer (i.e., only the recent) events relevant to the development of their networks. Accordingly, their decisions regarding newly developed interpersonal relationships may involve less complete

information and more limited experiences, and are more likely to be superficial compared to individuals with greater temporal depth.

Challenged by higher stress and sketchy decisions, the relationships made by individuals with less temporal depth may be weak and their developmental networks unstable. Moreover, building on the research findings of El Sawy (1983), as a result of their short-term expectations, these individuals may focus only on the short-term in considering their developmental networks. Without a longer-term strategic vision of these developers' interest, concern and involvement, these relationships are likely to break down and be short-lived. In contrast, individuals with greater (i.e., long-term) temporal depth may use more complete information, be more thorough, comprehensive, and involved in anticipating future developments, therefore seeking stronger ties with members of their developmental networks. They would tend to form the two types of networks reflecting stronger ties, entrepreneurial and traditional networks.

Proposition 8: Individuals' long-term temporal depth is positively related to the tendency to seek strong ties and therefore to forming entrepreneurial (high strength-high diversity) and traditional (high strength- low diversity) developmental networks.

Figure 1 displays each of the four developmental network types resulting from a combination of strong and weak ties, and high and low network diversity. The figure also displays the particular personality traits we suggest as being linked to individuals' development of each type of network.

Insert Figure 1 about here

Concluding Comments

Our purpose has been to stimulate thinking and contribute to theory about the potential role of personality characteristics in individuals' forming of four types of network structures: Entrepreneurial, opportunistic, traditional, and receptive. We acknowledge the contribution of Higgins and Kram (2001) and others who have reconceptualized mentoring as a multiple relationship phenomenon—a developmental network. Taking from Higgins and Kram's conceptualization of four types of developmental networks, we have explored how personality characteristics play a key role as individual-level influences on the formation of these networks. Our discussion and propositions are focused on personality characteristics that would lead an individual toward a higher or lower strength of ties and toward a higher or lower diversity of ties with others—the basis of the four network structures. Although to date there is limited research on personality and mentoring and developmental relationships, it appears that this is a promising avenue for future work.

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Figure 1

Examples of Personality Variables Relevant to Developmental Network Types

Relationship Strength

Relationship Diversity	Low	High
High	**Opportunistic Network** • Independent self-construal • High core self-evaluations • High openness to experience • Extraversion	**Entrepreneurial Network** • Interdependent self-construal • High core self-evaluations • High openness to experience • High conscientiousness • Extraversion • Long-term temporal depth
Low	**Receptive Network** • Independent self-construal	**Traditional Network** • Interdependent self-construal • Introversion • Long-term temporal depth • Low core self-evaluations