TAKING A STYLE PERSPECTIVE TO UNDERSTAND

ORGANIZATIONAL BEHAVIOR: A FOUR-DECADE REVIEW

EVA COOLS

Eva.Cools@vlerick.com

TAKING A STYLE PERSPECTIVE TO UNDERSTAND

ORGANIZATIONAL BEHAVIOR: A FOUR-DECADE REVIEW

EVA COOLS

Vlerick Leuven Gent Management School

Contact: Eva Cools

Vlerick Leuven Gent Management School

Tel: +32 09 210 97 78

Email: Eva.Cools@vlerick.com

ABSTRACT

This paper aims at providing a summary of empirical insights about the impact of cognitive styles on organizational behavior and management. A two-part discussion on the applications of cognitive styles in the workplace is presented. The first part focuses on the implications of cognitive styles for organizations in general by looking at strategic and human resource management aspects, such as person-environment fit, entrepreneurship, and innovation. The second part elaborates specifically on the influence of cognitive styles on people's day-to-day workplace behavior. The link between cognitive styles and task-oriented aspects (i.e., decision making) will be dealt with on the one hand and people-related aspects (implying teamwork and interpersonal relationships) on the other hand. Finally, conclusions will be drawn about the implications of the summarized studies for research and practice.

Keywords: cognitive styles; review; management and organizational implications.

A major challenge for work and organizational psychology (WOP) and management research is to understand and predict how people behave in organizational settings. To this end, many researchers have examined the impact of individual and situational factors on organizations and people in work settings (e.g., D'Amato & Zijlstra, 2008; Miron, Erez, & Naveh, 2004). One individual characteristic studied intensively in this context are cognitive styles, which are – in line with the results of a recent Delphi study among international experts in the style field – defined as "individual differences in processing that are integrally linked to a person's cognitive system… they are a person's preferred way of processing… they are partly fixed, relatively stable and possibly innate preferences" (Peterson, Rayner, & Armstrong, 2009, p. 11).

Although cognitive styles are considered to be crucial determinants of organizational behavior that manifest themselves in individual workplace actions and organizational systems and processes (Sadler-Smith & Badger, 1998), level of interest in the field has waxed and waned over the years because of (1) the unclear conceptualization of the concept in relation to personality, cognition, and other concepts from the field of individual differences psychology, (2) the large number of style dimensions, and (3) the variable quality of some early empirical style research (Rayner & Peterson, 2009; Zhang & Sternberg, 2009). Research into styles began in the early part of the previous century (e.g., Allport, 1937; Jung, 1923; Lewin, 1935), but research activity in the field peaked in the period between the 1940s and 1970s (Riding & Cheema, 1991). Growing interests in cognitive style during that period led to the development of a wide diversity of theories and instruments, causing a loss of appeal among cognitive scientists in the 1970s. Paradoxically, around the time that interest in the style field declined among cognitive scientists, the number of applied style publications grew rapidly, demonstrating interest among practitioners to understand the influence of individual differences in cognition (Kozhevnikov, 2007). Consequently, over the past 40 years interest in styles has been strongest among applied researchers, not only in the fields of education and management, but also in other fields such as medicine (e.g., Curry, 2000).

Specific interests in style in the field of management and organizational behavior continued to grow during the 1980s (Hayes & Allinson, 1994), as cognitive styles were increasingly seen as a critical intervening variable in work performance. Streufert and Nogami (1989) argued that cognitive style may be one of the variables that determine whether people are able to respond appropriately across a variety of situations. These authors suggested that cognitive styles can play an important

role in clarifying why some people continually perform well even when transferred between jobs or tasks, while others (with equal intelligence, experience, and training) perform well in one situation but fail when placed in another setting. Hayes and Allinson (1994) argued that cognitive styles may be used in organizations to inform and improve the quality of decision making in relation to personnel selection and placement, task and learning performance, internal communication, career guidance and counseling, fit with the organization climate, task design, team composition, conflict management, team building, management style, and training and development. Styles continue to provide a much needed interface between research on cognition and personality (Riding & Rayner, 1998; Sternberg & Grigorenko, 1997) and show a great deal of promise for the future in helping us understand some of the variation in job performance that cannot be accounted for by individual differences in abilities. Building further on this latter argument, Sadler-Smith (1998) refers to a 'ceiling effect' for ability above which cognitive style might become a crucial determinant of performance, arguing that in certain situations – more specifically where ambiguity and uncertainty prevail – differences in ability may not yield increased effectiveness. In these situations, differences in inherent and consistent ways of organizing and processing information (i.e., style) may have a larger impact on behavior than ability, as they refer to a person's typical rather than maximum (i.e., ability) performance. Scholars agree that cognitive styles can be an important factor to take into account in organizational settings and processes, for instance in the areas of selection, vocational and occupational preferences, team composition and performance, training and development, and organizational learning (e.g., Armstrong & Cools, 2009; Sadler-Smith, 1998). To get a better view on the assumed relevance of a cognitive style perspective for business and management settings, this paper aims to provide a focused two-part overview of research on the applications of style in the workplace, the first part looking at the organizational level and the second one at individual behavior (see Figure 1).

Insert Figure 1 about here

Importantly, before moving to the discussion of these aspects, it is necessary to clearly delineate what choices were made when writing this review. First, I use the concept 'cognitive styles' as an umbrella term, including 'thinking styles', 'intellectual styles', and 'personality styles'. 'Learning styles', and related concepts such as 'approaches to learning' and 'learning patterns', are excluded from this review. Second, the paper largely spans a 40-year period, because this period is the time over which the number of applied publications grew (Kozhevnikov, 2007). Third, the review mainly considers peer-reviewed journal articles, as they represent validated knowledge and have been

argued to have the highest impact on a field of study (Podsakoff, MacKenzie, Bachrach, & Podsakoff, 2005). Finally, a broad perspective is taken towards the applied cognitive style frameworks (in parallel with Armstrong & Cools, 2009; Cools, Armstrong, & Sadler-Smith, 2010), including both more established measures that are heavily used within the field of management and business and newly validated instruments in this area. Appendix 1 briefly summarizes the models referred to in this review to make it easier for the reader to follow the overview of research findings provided.

COGNITIVE STYLES AND ORGANIZATIONAL BEHAVIOR

This section focuses specifically on relevant empirical findings in relation to person-environment fit, and entrepreneurship and innovation.

Person-Environment Fit

Research on person-environment (PE) fit, examining the interaction and level of congruence between particular characteristics of the employee and characteristics of the work context or organization, has always been very popular (Ehrhart & Ziegert, 2005; Westerman & Cyr, 2004). Also in the field of cognitive styles, a great deal of attention has been paid to understand the work environment preferences (1) and career choices (2) of people with diverse cognitive styles as well as the consequences of what is called cognitive fit or misfit (3), as will be clear in the subsequent overview.

Work Environment Preferences

Work environments differ in terms of the infomation-processing requirements that are placed on individuals (Hayes & Allinson, 1998). As cognitive styles are individual preferences in information processing, researchers investigated whether or not they influence people's work environment preferences (e.g., Clapp & de Ciantis, 1989; Whooten, Barner, & Silver, 1994). According to Kirton (2003), there are clear differences between adaptors and innovators (using the Kirton Adaption-Innovation Inventory (KAI); Kirton, 1976) regarding their need for structure in a work environment. Adaptors prefer to work in well-defined and stable situations, while innovators are more comfortable working in unstructured and changing situations. People with a preference for judgment (using the Myers-Briggs Type Indicator (MBTI); Myers, McCaulley, Quenk, & Hammer,

2003) have been found to favor order, stability, and structured work environments, while people with a preference for perceiving want flexibility and more unstructured, dynamic work situations (Gardner & Martinko, 1996; Hirsh & Kummerow, 2000). Allinson and Hayes (1996) observed that analytical thinkers (as assessed by the Cognitive Style Index (CSI); Allinson & Hayes, 1996) preferred structured, ordered, and rather impersonal work environments. On the contrary, intuitive thinkers favored freedom from rules and regulations and personalized work relationships. Summarizing this research, it is clear that analytical thinkers have been found to prefer working in well-defined, stable, structured, ordered, and relatively impersonal situations, in which they can function within existing rules and procedures and prevailing structures. People with an intuitive style favor unstructured, changing, highly involving, innovative, flexible, dynamic, relatively personalized environments, in which they can work autonomously.

Vocational Choices and Career Preferences

In addition to empirical studies on work environment preferences, scholars have examined the link between cognitive styles and occupation type or career orientation (e.g., Järlström, 2000; Nordvik, 1996; Sullivan & Hansen, 2004). These studies have sought insights into how individual differences influenced career decision making and vocational development, assuming that people with different cognitive styles differ in their vocational choices and self-select for particular jobs as they choose particular occupations on the basis of their preferences for certain task and job characteristics. These similarities in preferred ways of dealing with information (i.e., cognitive style) within occupational groups have also been called cognitive climates in organizations (Kirton & de Ciantis, 1994; Kirton & McCarthy, 1988), supposing that the majority of people with a particular cognitive style constitute the group's cognitive climate. Hayes and Allinson (1998) also suggested that, due to self-selection, people within many groups in organizations will share a similar cognitive style that is related to the information-processing requirements of their work.

Accountants, for instance, appear to be skewed towards adaption on the KAI (Gul, 1986) and were more MBTI sensing, thinking, and judging (ISTJs and ESTJs) (Parkinson & Taggar, 2007). Gridley (2007), comparing artists and engineers on the Thinking Style Inventory (TSI; Sternberg, 1997), found that artists preferred inventing and developing new ideas (legislative style) rather than implementing pre-existing ideas (executive style), and also preferred change (liberal style) more than the status quo (conservative style). In contrast, engineers preferred to organize their thinking more hierarchically, and did not resist implementing the plans of others and accepting inputs from sources outside themselves. Allinson and Hayes (1996) found that personnel managers were more intuitive

(measured with the CSI) than production, marketing, and financial managers. Other studies have looked specifically at nurses, scientists, bankers, teachers, managers, IT professionals, and at diverse types of students (e.g., Bennett, Pietri, & Moak, 1998; Collins, White, & O'Brien, 1992; Doucette, Kelleher, Murphy, & Young, 1998; Murphy, Casey, Day, & Young, 1997) as a way to identify the cognitive profile of a broad variety of occupations (also see below for a more specific focus on entrepreneurs).

Using the Group Embedded Figures Test (GEFT; Witkin, Oltman, Raskin, & Karp, 1971), Witkin, Moore, Goodenough, and Cox (1977) observed that field independents (i.e., analytical thinkers) appeared to be drawn to professions such as chemistry, engineering, architecture, and surgical nursing; field dependents (i.e., intuitive thinkers) tended to be drawn to occupations such as social work, teaching, sales, personnel management, probation support, and psychiatric nursing. Similarly, relationships have been found between Holland's (1985) vocational types and cognitive styles: field independent types (using the GEFT) preferred vocational activity that required competence in analytical articulated cognitive structure; field dependent types tended to be drawn to occupations with high levels of social content and an emphasis on interpersonal relations (Alvi, Khan, Hussain, & Baig, 1988).

Mean KAI scores of people also reflected the type and nature of tasks they were doing in their job (for an overview of relevant studies, see: Foxall & Hackett, 1994; Kirton, 2003; Tullett, 1997). People who worked within a structured environment and who were expected to work within prescribed rules (e.g., managers within local authority, established bankers), showed a bias towards adaption. People whose job gave them more freedom of action and who functioned within less structure, showed a bias towards innovation, such as strategic planners, bank vice-presidents, and people with responsibility for introducing new products within research and development departments. These studies also found that groups whose focus of operation is oriented outside the organization (e.g., sales and marketing) or across boundaries within organizations (e.g., personnel, strategic planning, project management) had a more innovative cognitive style than those with a focus of operation which is more within function (e.g., production, maintenance, administration).

Cools, Van den Broeck, and Bouckenooghe (2009a) identified a knowing-oriented cognitive climate (using the Cognitive Style Indicator (CoSI); Cools & Van den Broeck, 2007) in finance, information technology, and research and development functions; a planning-oriented cognitive climate in administrative and technical and production functions; and a creating-oriented cognitive climate in sales and marketing functions and in general management. In a study with final year's

students on their future career orientation, Cools, Vanderheyden, and Horlait (2009b) also observed clear links between student's cognitive profile (assessed by the CoSI) and their preferred career anchors (i.e., the career values people strive for in their job; Schein, 1990). They found that the knowing style predicted a preference for the career anchor 'pure challenge', confirming the preference for people with a knowing style for intellectually challenging tasks and jobs (Cools & Van den Broeck, 2008a). For the planning style, they found evidence for a drive towards security and stability, control over the whole work process, and a balance between work and private life. People with a creating style searched for challenges, autonomy, and self-realization, which is consistent with their preference for tasks and jobs that require creativity, action, flexibility, and own input (Cools & Van den Broeck, 2008a).

Cognitive Fit or Misfit

Following the wide attention for PE fit in other research domains, Chan (1996) introduced the concept of cognitive misfit within the cognitive style field, which he defined as the degree of mismatch between an individual's cognitive style and the predominant style demands of the work context. A match between one's cognitive style and the job demands is expected to yield positive outcomes (e.g., job satisfaction, organizational commitment, career success), while a mismatch is expected to lead to negative outcomes (e.g., increased turnover, less motivation, higher levels of work-related stress, interpersonal conflicts). Goodenough (1985) argued that people will be more satisfied and effective if they can work in conditions that are compatible with their cognitive style. Kirton and McCarthy (1988) stated that people who find themselves in a cognitive climate that is not suited to their own cognitive style are likely to be unhappy and will try to leave. Contrary to the large emphasis on the importance of cognitive fit in theoretical works, few studies have investigated empirically whether or not cognitive (mis)fit actually leads to these expected outcomes.

Within the style field, six studies were found in the area of cognitive (mis)fit. Chilton, Hardgrave, and Armstrong (2005) found that performance decreased and stress levels increased as the gap between software developers' cognitive styles (using the KAI) and the perceived environment demands became wider. Mitchell and Cahill (2005) observed that plebes who voluntarily withdrew from a preparatory training program of the US Naval Academy before completion scored significantly higher on innovation (measured with the KAI) than the ones who stayed, which they attribute to the presumably lower compatibility of this style with the military environment. In a recent study with entrepreneurs, Brigham, De Castro, and Shepherd (2007) found that cognitive misfit (using the CSI) led to lower levels of satisfaction with the work environment and

higher levels of intention to exit and actual turnover. In a study with engineering functions, Chan (1996) concluded that cognitive misfit (assessed by the KAI) provided significant contribution to predict actual turnover, but it was uncorrelated with employee performance. Chang, Choi, and Kim (2008), studying turnover amongst R&D professionals, did not find support for their hypothesis that R&D professionals with an innovative cognitive style (using the KAI) would show less turnover than adaptive (i.e., analytical) types. Cools et al. (2009a) found limited support for the hypotheses that people in cognitive fit (measured with the CoSI) are more satisfied with their job on the one hand, and that they show less intention to leave and less job search behavior than people in cognitive misfit on the other hand. However, they did find that people with a creating style show more job search behavior and intention to leave than people with a planning style, irrespective of the cognitive climate they are working in.

Conclusion and Implications

The substantial interest in person-environment fit in the cognitive style field is unsurprising, as a better understanding of the reasons why people leave their job and what satisfies them is crucial to improve selection and retention efforts and can lead to cost savings. Two major conclusions can be drawn from this review.

First, there are many studies that aim to understand the work environment and vocational preferences of people with diverse cognitive profiles. These studies use a wide range of style measures and look at people who are already employed as well as at diverse types of students who still need to make their career choice. In terms of future research, it might be interesting to replicate the findings of previous investigations, preferably using a different style measure than the one used in the original study or even better a composite measure combining diverse style instruments, as some studies reported inconsistent findings. These inconsistent research findings from past research might be due to the wide range of style measures used in this type of research or alternatively to the unclear conceptualization of what a specific job or function implies (e.g., Cools et al., 2009ba; Hicks, Bagg, Doyle, & Young, 2007). With regard to the latter aspect, Kirton (2003) claimed that there are not only differences between functional groups within organizations, but also within the boundaries of jobs, implying that functions can contain differing cognitive style orientations within them depending on the style demands of the job (e.g., production engineer versus R&D engineer), which is also an area that needs further investigation.

Second, with regard to cognitive (mis)fit, it is striking that five of the six studies discussed focused on one specific occupation (except for Cools et al., 2009a) and that four of these studies used the KAI to measure cognitive styles, hence adhering to a unidimensional perspective on cognitive styles. Further studies in this area need to (1) take into account different occupational groups in their design and (2) consider multidimensional style perspectives, which is in line with more recent conceptual developments in the style field (e.g., the application of dual-process theory, see Sadler-Smith, 2009). In addition, the PE fit field in general recently conceptualized PE fit as a multidimensional construct that evolves over time and that is composed of fit with the vocation, organization, job, group, and other people (Jansen & Kristof-Brown, 2006; Westerman & Cyr, 2004). Moreover, research on the effects of PE fit on work attitudes, behavioral outcomes, and job performance has produced mixed results due to the various ways fit has been conceptualized and measured (Arthur, Bell, Villado, & Doverspike, 2006; Hoffman & Woehr, 2006; Verquer, Beehr, & Wagner, 2003), which was also apparent in the cognitive style studies in this area. In this sense, future cognitive misfit studies also need more complex models in which more individual and environmental factors, a longitudinal perspective, and multiple levels are taken into account. It is, for instance, possible that – with the increased use of cross-functional teams in organizations – it is necessary to involve person-team fit in addition to fit with the functional domain in these studies.

Entrepreneurship and Innovation

As the business environment in which many entrepreneurs operate is increasingly complex, unpredictable, and unstable, the information-processing demands that are placed on these business leaders are enormous, which might clarify why the entrepreneurship field has recently started to put more emphasis on a cognitive rather than a trait perspective in its research (Baron, 2004). Two broad streams of research on entrepreneurship and innovation can be distinguished within the cognitive style field, one stream focusing on characterizing the cognitive profile of entrepreneurs, and a second stream looking at the implications of diverse types of cognitive profiles on the entrepreneurial process and firm performance.

Entrepreneurs versus Non-Entrepreneurs

Several scholars compared entrepreneurs and non-entrepreneurs to investigate whether or not they differ in their cognitive profile. Goldsmith and Kerr (1991), for instance, reported a higher score on an innovative cognitive style (using the KAI) for students following an entrepreneurship

class. Similarly, Cools et al. (2009b) found that final year's students with a CoSI creating style showed a preference to be self-employed (rather than being organizationally employed), while the planning style showed a negative correlation with entrepreneurial intention. Buttner and Gryskiewicz (1993) and Stewart, Watson, Carland, and Carland (1998) found a more innovative cognitive style (assessed by the KAI) among entrepreneurs than among managers in large established organizations; the latter tended to prefer a more adaptive cognitive style. Armstrong and Hird (2009) found that entrepreneurs tended to be more intuitive (using the CSI) and less analytic than non-entrepreneurs; more intuitive entrepreneurs also exhibited higher levels of entrepreneurial drive.

Allinson, Chell, and Hayes (2000) observed that entrepreneurs had a more intuitive style (using the CSI) than the general population of managers, but did not differ in their cognitive style from the senior managers and executives in their samples. This finding seems to confirm the belief that intuition increases with hierarchical level, as managers on higher levels – like entrepreneurs – also face uncertainty, time pressure, ambiguity, and incomplete information, which requires of them a more intuitive problem-solving approach (Allinson & Hayes, 1996; Sadler-Smith, 2004). Similarly, Cools and Van den Broeck (2008b) did not find a significant difference in their study between entrepreneurs and healthcare managers for the CoSI creating style. However, these groups did differ on the knowing and the planning style, with a significantly higher score for the non-entrepreneurs on these two styles.

Following these partially inconsistent findings of previous research in this area, Groves, Vance, Choi, and Mendez (2008) investigated whether entrepreneurs score higher on nonlinear thinking (using the Linear/Non-Linear Thinking Styles Profile (LNTSP); Vance, Groves, Paik, & Kindler, 2007), as found in most earlier studies, or whether they show a balance between linear and nonlinear thinking, arguing that entrepreneurs need to perform many different tasks that are both analytical and intuitive in nature. As they predicted, the entrepreneurs showed a greater balance in linear/nonlinear thinking style than the professional actors (who scored higher on nonlinear thinking) and accountants (scoring higher on linear thinking) in their study. They concluded that successful entrepreneurs apparently strive for a balance between linear and nonlinear thinking in their entrepreneurial activities.

Diverse Types of Entrepreneurs

Within the second stream of entrepreneurship research in the cognitive style field, style differences have been studied in relation to the business opportunity identification process to try to

answer the question why some types of entrepreneurs are better able to discover and exploit particular entrepreneurial opportunities than others and how diverse types of entrepreneurs differ in their entrepreneurial processes (e.g., Dimov, 2007; Hmieleski & Corbett, 2006; Walsh & Anderson, 1995). Buttner and Gryskiewicz (1993), for instance, found that more innovative entrepreneurs (using the KAI) had been operating their business only for a short period (i.e., two years or less), whereas more adaptive entrepreneurs had been operating their business a longer time (i.e., more than eight years). Innovative entrepreneurs also tended to start more ventures than adaptive entrepreneurs (on average 2.4 versus 1.2 businesses respectively). These authors also found that adaptive entrepreneurs spent more time than innovative ones in administrative activities, which is in line with their preferred cognitive style. Barbosa, Gerhardt, and Kickul (2007) examined whether entrepreneurs with diverse cognitive styles and risk preferences differ in their entrepreneurial intentions and self-efficacy. Interestingly, they found that intuitives and analysts (as measured with the CSI) differed in their entrepreneurial self-efficacy, with intuitive entrepreneurs showing lower perceived self-efficacy concerning the establishment of relationship with investors (relationship self-efficacy), the economic management of the new venture (managerial self-efficacy), and their capacity to tolerate ambiguity and stress (tolerance self-efficacy). However, intuitive entrepreneurs who also had a high risk preference demonstrated higher levels of opportunity identification self-efficacy. Finally, in their longitudinal qualitative study on cognitive style and growth intentions, Dutta and Thornbill (2008) found that more holistic, intuitive entrepreneurs had a wider variety of growth intentions relative to analytic entrepreneurs and also showed bigger (upward or downward) adaptations in their growth intentions when the competitive conditions changed. Analytic entrepreneurs tended to stay closer to their initial growth intentions and made only relatively small changes over time.

Other studies within this stream of research focused on the link between cognitive styles and firm growth and performance, making a comparison between the cognitive profiles of entrepreneurs from high performing and low performing firms. Ginn and Sexton (1990), for instance, found cognitive profile differences (using the MBTI) between founders of rapid-growth versus slower-growth firms, with founders of rapid-growth firms showing a stronger preference for an intuitive approach when gathering information. Sadler-Smith (2004) found that the intuitive cognitive style (using the General Decision-Making Style questionnaire (GDMS; Scott & Bruce, 1995) showed a positive relationship with financial (sales growth) as well as non-financial (efficiency of operations, public image and good will, and quality of products and services) firm performance. Finally, investigating the role of cognitive styles in innovation, Ko (2008) found that only the TSI liberal cognitive style was positively related to innovation.

Conclusion and Implications

In relation with the recently established cognitive approach within the entrepreneurship field, research on the cognitive profile of entrepreneurs is of potential high economic value. Rather than looking at those stable, dispositional traits that characterize entrepreneurs and distinguish them from non-entrepreneurs, the cognitive perspective looks at those aspects of entrepreneurial cognition that are relevant in the entrepreneurial process and focuses on detecting knowledge structures and mental models that entrepreneurs use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth (Mitchell et al., 2002). Two major conclusions can be drawn in this area.

First, it can be concluded from this stream of style-related entrepreneurship research that entrepreneurs seem to differ from certain types of non-entrepreneurs (e.g., managers of large organizations). However, these findings are inconsistent across studies reported, with some authors claiming that entrepreneurs do not necessarily score higher on a more intuitive style, but rather show a balance between intuition and analysis (e.g., Groves et al., 2008). In parallel with the earlier suggestions made in relation to PE fit research, a multidimensional in contrary to a unidimensional style perspective needs to be encouraged in future research to get a clearer view on the cognitive profile of entrepreneurs in comparison with diverse types of non-entrepreneurs.

Second, it is clear from the cognitive style studies in the entrepreneurship field that entrepreneurs do not constitute a homogeneous group. Interesting differences have been found between entrepreneurs with different cognitive styles in terms of entrepreneurial processes, firm performance, and growth. Overall, these results seem to be consistent with Olson's (1985) original idea that particular information-processing approaches are effective at different phases of the entrepreneurial lifecycle. He expected individuals with a more intuitive cognitive style to be more effective in the initiation phase of the entrepreneurial process (i.e., the stage in which new ideas are generated), whereas individuals with a more analytical style would be better in the implementation phase (i.e., the stage in which ideas are put in practice). Further research is this area, using diverse or integrated cognitive style measures as well as a broad range of performance indicators in a longitudinal way, is particularly valuable to stimulate evidence-based practice. For instance, results of these types of studies can provide clear input to avoid governmental policies that treat firms with a 'one-size-fits-all' approach.

How people actually execute their organizational commitments depends on many factors. In addition to situational factors, such as the organizational culture and structure, individual characteristics play an important role in determining individual behavior and performance (Buttner, Gryskiewicz, & Hidore, 1999). Armstrong and Priola (2001) described cognitive styles as a potential crucial factor for effective decision making and for successful interpersonal relationships, and as such they can have an important influence on how people develop their organizational role (Church & Waclawski, 1998). This section focuses first on empirical results with regard to decision making as an aspect of task-oriented behavioral aspects, then on interpersonal relationships and teamwork as relevant people-oriented behaviors.

Task-Oriented Behaviors

The relationship between cognitive styles and decision making has aroused significant interest amongst researchers, as cognitive styles may help explain why people with similar skills and abilities come to different decisions. Research within this domain can be divided in the following categories: decision-making behavior, decision-making biases, and strategic decision making.

Decision-Making Behavior

Studies on decision-making behavior clearly show that the courses of action in decision making are expressive of decision makers' cognitive styles (e.g., Antonietti & Gioletta, 1995; Betsch & Kunz, 2008; Hunt, Krzystofiak, Meindl, & Yousry, 1989). Research with the MBTI, for instance, found clear differences in managers' decision-making approaches according to their cognitive styles (Gardner & Martinko, 1996; Myers et al., 2003). Sensing managers favored concrete and actual data in their decision processes, while intuitive types preferred relying on heuristics and hunches. Thinking types liked to use objective information and preferred a logical and impersonal decision-making approach. In contrast, feeling managers were more affective and personal, relying also on subjective information. Managers with a preference for judgment favored a structured and planned approach, while perceiving managers relied more on spontaneity, flexibility, and creativity.

Leonard, Scholl, and Kowalski (1999), using diverse cognitive style measures, found that people with an analytical style make decisions on the basis of abstract thinking, logic, and careful analysis. Kirton (2003) concluded that adaptors (using the KAI) tend to take the problems as a given and focus on generating ways to develop better solutions for immediate high efficiency. Innovators focus on redefining problems and producing multiple, non-obvious ideas. Quantitative and qualitative research with the CoSI confirms that people with different cognitive styles use different problem-solving strategies and demonstrate various decision-making behaviors (Cools & Van den Broeck, 2007, 2008a). Individuals with a knowing style preferred a logical, rational, and impersonal decision-making approach, while planners favored an objective, structured, conventional, and efficient problem-solving approach, and creating people had a preference for a creative, unconventional, flexible way of decision making. Knowing and creating types were focused on the content of decision making (taking facts-based or creative decisions respectively), whereas planning people mostly referred to the decision-making process as such.

Apart from these studies on the preferred decision-making approaches of people with diverse cognitive profiles, some scholars looked at further applications in particular decision-making situations. Huysmans (1970), for instance, employed an experimental task consisting of a business game in which the participants assumed the role of company president being offered recommendations by managers. Heuristic participants (i.e. who used common sense, intuition and feelings) rejected, either completely or in part, recommendations when the accounting manager supported his recommendations with an analysis of the technical problems. Analytical participants on the other hand responded more positively to proposals when an explicit-understanding approach was used. Hunt et al. (1989) also found congruence between cognitive style and preferred decision-making strategy, implying that analytical people used more analytical advisors in their decision strategy, while intuitive people chose for intuitive advisors. Furthermore, Gul (1983, 1984) observed a statistically significant, albeit weak, relationship between field dependence (assessed by the GEFT) and decision confidence. Field dependent accountants made more confident decisions than field independent accountants when exposed to ambiguous accounting information. In a study of resource allocation decisions, Chenhall and Morris (1991) found that MBTI intuitive managers tended to incorporate broader opportunity costs into their economic decisions, whereas sensing managers tended to perceive expenditure as incurred and justified for other projects and hence irrelevant to the current project. Sensing types did not identity opportunity costs, which is a potential shortcoming that could lead to misspecification in the treatment of a firm's existing assets. Martinsen (1993, 1995) used Kaufmann's (1979) assimilator-explorer styles inventory to study the influence of cognitive style and experience on creative problem solving. In both studies he found that

explorers performed better when prior experience was low (i.e., there was high task novelty), and assimilators performed better when prior experience was high (i.e., low task novelty).

Decision-Making Biases

Rational models of decision making often ignored the influence of individual differences, assuming that people process information and arrive at judgments in a similar, rational way (Rajagopalan, Rasheed, & Datta, 1993). The following studies on cognitive biases, escalation of commitment, and framing effects clearly show that decision making does not always follow this rational process. People tend to engage in diverse irrational decision-making practices, which have been shown to vary according to cognitive style differences. For instance, Hayley and Stumpf's (1989) study with senior and middle managers revealed that different MBTI types habitually use distinct heuristics to gather data and evaluate alternatives in strategic decision making. While many Sensing-Feeling (SF) types manifested availability biases (focusing mainly on value-latent or emotional information), a majority of Intuiting-Feeling (NF) types exhibited vividness biases (focusing mainly on idiosyncratic and memorable information). In a later study, Stumpf and Dunbar (1991) found that individuals with particular cognitive styles (using the MBTI) take patterns of actions that reflect specific biases. Intuiting-Thinking (NT) types were prone to a positivity bias (i.e., emphasis on opportunities and low attention to threat), Sensing-Feelers were prone to a social desirability bias (i.e., conformance to socially acceptable business practices), and Intuiting-Feelers were prone to a reasoning-by-analogy bias (i.e., novel actions for target organization based on comparison to situation in some other organization).

The tendency for a person to increase commitment to a previously chosen course of action when the outcome of one's previous decision is negative is referred to as escalation of commitment, a phenomenon which has significant implications for organizational decision making (Fox & Straw, 1979). While Singer (1990) did not find a significant association between escalation of commitment and cognitive style (using the KAI), Wong, Kwong, and Ng (2008) reported trivial, albeit statistically significant, correlations between the rationality component of the Rational-Experiential Inventory (REI; Epstein, Pacini, Denes-Raj, & Heier, 1996) and escalation of commitment.

As far as framing effects are concerned, McElroy and Seta (2003) found that holists were especially likely to be influenced by the way in which a decision was framed (conforming to the predictions of prospect theory, which expect risk aversion for gains and risk seeking for losses), whilst analytics were not likely to be influenced (conforming to the predictions of expected utility theory,

which expect that the way in which the decision is framed does not change the expected utility of the risk-seeking or risk-averse options). Similarly, McIntosh (2005) found that individuals scoring highly on the REI experientiality scale were more likely more swayed by the way in which problems were framed (conforming to predictions of prospect theory). Shiloh, Salton, and Sharabi (2002) observed a three-way interaction of intuitive×rational×framing (REI), indicating that high rational/high intuitive and low rational/low intuitive style combinations were most prone to framing effects.

Strategic Decision Making

A number of studies have used the MBTI to explore the effects of cognitive style on strategic decision-making processes and outcomes, assuming top managers' strategic choices reflect their style preferences (e.g., Gallén, 1997, 2006; Hough & ogilvie, 2005). Berr, Church, and Waclawski (2000) observed that people with a preference for intuition tended to be consistently perceived (by others) to be more effective in behavior related to innovation and strategic thinking than managers with a preference for sensing. In addition, they found that perceiving managers were rated better on innovation because they were more willing to take risks or to try something new than their judging counterparts. Hough and ogilvie (2005), using the MBTI, found that Intuiting-Thinking (NT) executives used intuition to make cognitive leaps based on objective information and crafted more decisions of higher quality. Sensing-Feeling (SF) executives took time to seek socially acceptable decisions, made the lowest number of decisions, and made decisions of lowest perceived effectiveness. In addition, extraverted executives were seen by others as more effective than introverts, when in fact extraverts were no more decisive than introverts. In a study of 70 senior managers in the spa industry, Gallén (2006) found that Sensing-Thinking (ST) and Sensing-Feeling (SF) types more often described the defender strategy as the most viable option (i.e., offering a stable set of products and competing mainly based on price, quality, service, and delivery), while Intuiting-Thinking (NT) executives preferred a prospector firm strategy (i.e., having a broad product definition, striving to be first in the market, and focusing on change and innovation).

Hodgkinson and Clarke (2007) outlined an alternative two-dimensional framework to investigate the impact of individual differences in cognitives style on organizational strategizing. Their framework contains four broad types depending on an individual's preference for analysis (low/high) or intuition (low/high). People occupying the low/low, low/high, high/low, high/high preferences with regard to analysis and intuition respectively are labeled 'non-discerning', 'big picture conscious', 'detail conscious', and 'cognitively versatile'. These basic information-processing

tendencies are believed by these authors to be fundamental to the ways in which strategy workers approach their work.

Different studies also explicitly focused on risk perception of people with diverse cognitive profiles in the context of strategic decision making, which all show that cognitive style differences are an important factor in explaining the likelihood of taking strategic action and the perceived risk seen in this action. Henderson and Nutt (1980), for instance, studied the relationship between MBTI styles, decision-making behavior, and assessment of risk amongst experienced decision makers from hospitals and firms. Sensing-Thinking types perceived highest levels of risk and were reluctant to adopt projects; Sensing-Feelers were risk tolerant and more likely to adopt projects. Blaylock (1985), using an experimental design to study the interaction between style (measured with the MBTI) and situation (structured and unstructured) in their effect on risk-related behaviour, found that feeling types based their judgments on information that may not be obvious to other styles. A change in the parameters of the environment also had a greater effect on feeling types' decisions than on those of thinking types. Participants with a sensing cognitive style consciously structured their decisions by developing a plan to look for cues in the data, stressing hard data and rules that govern decision processes. Intuitives stressed hypothetical possibilities and were concerned with contextual factor, taking a more gestalt approach to the decision. In a later study, Nutt (1990) explored the relationships between MBTI style and executives' decisions to adopt particular projects and their perception of projects' risk: SF executives were inclined to adopt high uncertainty projects, whereas ST executives wanted to reject them (the same trends were apparent for perceived risk); NF executives dramatically reduced their view of a project's adoptability when faced with uncertain projects and dramatically increased their view of its perceived risk. Risk aversion was also found to be related to MBTI styles in a study by Filbeck, Hatfield, and Horvath (2005). Individuals with a preference for thinking tended to be more risk tolerant than those with a preference for feeling. Sensing types are willing to tolerate more upside or downside potential than those with a preference for intuition.

Conclusion and Implications

Mohammed and Schwall (2009) recently concluded in their review study on decision making that there has been a lack of systematic research on individual differences in the decision-making context, although this does not seem to be the case for cognitive styles, as they have been extensively studied in the area of decision making (e.g., Hough & ogilvie, 2005; Leonard et al., 1999). Overall, these studies looked at the impact of cognitive style differences on general and specific

decision-making behaviors, diverse types of decision-making biases, escalation of commitment effects, framing effects, strategic decision-making practices, and risk perception. It is striking that most research in this area has been conducted using the MBTI as a cognitive style measure. Future research with diverse cognitive style measures is needed to cross-validate findings of previous research and in this sense can help to gain further insight about the impact of cognitive styles on particular aspects of information processing and decision making, as also suggested by Leonard et al. (1999).

People-Oriented Behaviors

Given the strong focus on the people aspect of organizational behavior and management (Kouzes & Posner, 2002) and the increased use of teams in organizations to answer the ever more competitive challenges in the global marketplace, a good understanding of how cognitive styles influence interpersonal relationships is highly valuable. A number of studies have examined cognitive styles in relation to various aspects of people-oriented behavior and teamwork, including: interpersonal behavior, dyadic relationships, team dynamics and processes, team role preferences, and team performance.

Interpersonal Behavior

Starting from the premise that cognitive style differences may fundamentally affect the nature of interpersonal relationships, researchers looked at cognitive styles in the context of interpersonal behavior. Research with the CSI found that people with a more analytical style tended to be more task oriented, relatively less friendly, more impersonal, and more self-controlling in their emotional behavior. Intuitive people were more interpersonally oriented, expressive, relatively friendly, warm towards others, and serving more psychosocial functions during interpersonal relationships (see: Armstrong, 2000; Armstrong & Priola, 2001; Priola, Smith, & Armstrong, 2004). In their qualitative study on the link between cognitive styles (CoSI) and managerial behavior, Cools and Van den Broeck (2008a) found that people with a knowing style preferred a straightforward way to deal with others. Planners were more inclined to give feedback in a diplomatic way. People with a creating style tended to be more emotionally involved, using a personal approach in handling conflicts and feedback situations.

Dyadic Relationships

Several researchers examined the influence of style congruence on dyadic relationships (e.g., student-supervisor, mentor-protégé) (e.g., Allinson, Armstrong, & Hayes, 2001; Armstrong, Allinson, & Hayes, 1997, 2002, 2004; Witkin & Goodenough, 1977). Cognitive similarity is expected to yield smoother interactions and positive mutual feelings among people due to shared interests, common personality characteristics, and similar ways of communicating (Witkin & Goodenough, 1977), whereas cognitive dissimilarity may result in conflict because style differences lead to different interests, values, and problem-solving approaches.

Some studies indeed found that cognitive style congruence led to satisfaction with the relationship, high performance, mutual understanding and liking, effective interpersonal relations, and good communication (see: Allinson et al., 2001; Armstrong, 2000), although other studies observed opposite results. Armstrong et al. (2002), for instance, found only partial support for the congruence hypothesis, and Armstrong et al. (1997) did not find support in their study for the beneficial impact of style congruence (using the CSI) on the quality of the relationship between students and supervisors in an educational context. Cheng, Luckett, and Schulz (2003) found higher performance on a complex decision task for dissimilar dyads than for dyads with a similar cognitive style (using the MBTI). These latter studies suggest that dissimilarity between people may under particular circumstances lead to more positive outcomes than similarity.

Other researchers focused specifically on the relationships between cognitive style and leader-subordinate relations. Atwater and Yammarino (1991) found that MBTI feeling type leaders were rated more highly on transformational and transactional leadership by both superiors and subordinates than thinking types. Allinson et al. (2001) found intuitive leaders (assessed by the CSI) to be less domineering and more nurturing in leader-member exchange (LMX) relationships than analytic leaders. Intuitive leaders were also better liked and more respected by analytic members than analytic leaders were by intuitive members. In contrast, Suazo, Turnley, and Mai-Dalton (2008) found that congruence of style is associated with higher quality leader-subordinate relationships, with concomitant effects on interactions and communications reducing the likelihood of subordinates believing psychological contracts have been violated.

Teamwork

In the context of teamwork, three types of studies have been conducted on cognitive styles. These include the influence of cognitive-based team composition on the team processes and dynamics, its impact on the team's performance, and the relation between cognitive styles and team role preferences.

With regard to the link between cognitive styles and team behavior, Armstrong and Priola (2001) found that intuitive team members (using the CSI) in self-managed work teams contributed more socio-emotional-oriented (i.e., interactions concerned with group solidarity and attraction between members) and more task-oriented acts (i.e., interactions focused on task attainment) than analytical team members did. As the latter aspect was contrary to their hypothesis, they attributed this to the nature of the task facing the teams, which was relatively unstructured and organic. Priola et al. (2004) tested this assumption further, using a more structured and mechanistic task. They found that intuitive individuals (using the CSI) could neither relate to the task, nor find a solution; analytics implemented the logical process necessary to solve the problem, while intuitives focused on maintaining group cohesiveness and the integrity.

Looking at the link between cognitive styles and team outcomes, Basadur and Head (2001) concluded that heterogeneity in cognitive styles had a positive effect on team performance in a creative problem-solving task and homogeneity of cognitive styles in a team led to less time needed to complete the task. In a study using project teams composed of different MBTI types, White (1984) also concluded that the more heterogeneous teams (i.e., containing four different types) were more successful than the less heterogeneous teams (i.e., containing two different types) in their systems development activities. Volkema and Gorman (1998) found no main effect of cognitive-based team composition (i.e., four-person homogeneous or heterogeneous teams with regard to cognitive styles) on decision performance. However, they did find that teams that were composed of diverse MBTI styles contributed significantly more and diverse types of objectives within the problem-formulation phase than homogeneous teams, which had a positive impact on team performance. In contrast, Hammerschmidt (1996) found that eight-person teams with a large cognitive gap (i.e., cognitive style differences of more than 20 KAI points between the four-person planning sub-team and the four-person implementing sub-team in his perspective) had lower success rates than more homogeneous teams. Karn, Syed-Abdullah, Cowling, and Holcombe's (2007) study of team cohesion and performance in software engineering teams found highest performing teams to be predominantly

MBTI intuitive-thinking types (typical for engineers), and stylistically heterogeneous teams experienced more conflict and performed significantly worse than homogenous teams.

Two studies explored the relationship between Belbin's (1981) Team Role Preferences Inventory (BTRPI) and Kirton's KAI (1976). Fisher, Macrosson, and Wong (1998) hypothesized a correlation matrix with each of the Kirton subscales (sufficiency versus proliferation of originality; efficiency; rule/group conformity) and the overall KAI score. Only 13 out of 24 subscale relationships were supported. In a later study, Aritzeta, Senior, and Swailes (2005) demonstrated stronger convergent validity between the KAI and the BTRPI. KAI subscale correlations were much more coherent than those reported by Fisher and colleagues (1998) and this was probably due to a misinterpretation of innovative and adaptive subscale scores on the part of these previous authors. Aritzeta et al. (2005) concluded that implementers, completer-finishers, team workers, and specialists will display an adaptive style; monitor evaluators and coordinators will act as bridges (moderating tensions occurring between high adaptors and innovators); and plants, shapers, and resource investigators will display an innovative cognitive style.

Conclusion and Implications

According to Berr et al. (2000), there is currently considerable interest in the potential impact of individual dispositions and preferences on organizational behavior and effectiveness. In terms of the relation between cognitive styles and people-oriented organizational behavior, it is clear that cognitive styles influence how people relate to others. However, the implications for dyadic relations or teamwork processes and performance, given the unequivocal findings of the research reported, are far less clear. Parallel with the increased popularity of teams in organizations, research interest in team characteristics contributing to their effectiveness has grown strongly (Mathieu, Maynard, Rapp, & Gilson, 2008). The aim of this kind of research was to gain insight into the determining factors of team effectiveness and ultimately to formulate recommendations for the design of high-performing teams. Despite a longstanding research history, no consensus has been achieved yet about whether team diversity has beneficial or hampering effects on team performance (Jackson, Joshi, & Erhardt, 2003; van Knippenberg & Schippers, 2007). This inconsistency is also notable in the cognitive style research in this area, as there are no clear results about the effects of congruence or heterogeneity on dyadic relationships or teamwork in diverse contexts. Further research is needed to enhance our understanding of cognitive styles in interpersonal relationships, investigating socio-emotional effects as well task-related performance (Allinson et al., 2001; Armstrong, 2000). Armstrong et al. (2004, p. 43) wrote: "Although cognitive style may indeed significantly affect the success of interpersonal

dyadic relationships, the idea that these effects can be reduced to a straightforward matching hypothesis may be too simplistic when considered across different contexts". In this sense, the nature of the task the team has to perform or the nature of the relation (e.g., leader-member or mentor-protégé) seems to be very important to take into account in this type of research.

GENERAL CONCLUSION

Obviously, how people behave in their job and organization depends not only on their cognitive style, but also on environmental factors and the interaction between their style and environmental conditions. In this sense, many empirical studies within the cognitive styles domain have been concerned with investigating some kind of congruence or fit and its consequences for performance, as styles cannot be studied in isolation. These studies have, for instance, examined the impact of style (dis)similarity within interpersonal relationships, the effects of homogeneous versus heterogeneous cognitive-based teams, or the consequences of cognitive fit or misfit in terms of occupations and work demand. Altogether, these studies aim to increase our understanding of how to use cognitive styles effectively in practice. Suedfeld and Tetlock (2001) argued that – despite the criticism on some theories of cognitive styles and the wide diversity of models – there is "widespread recognition that attention to individual differences could help us to understand variation that otherwise had to be consigned to the category of 'noise'" (p. 285).

However, on the downside, the results of styles research are not consistent and not conclusive in different areas, as a result of (1) the use of different cognitive style measures (with a predominance of the KAI in cognitive fit research, the MBTI in decision-making research, and the CSI in interpersonal research), (2) a lack of qualitative and longitudinal research, and (3) a lack of contextualization. Hence, considering the overall research base of this review and the above encouraging quote of Suedfeld and Tetlock (2001), following general recommendations to further improve the rigor and relevance of future style research in the area of work and organizational psychology and management can be made: (1) increase the number of qualitative and mixed-method studies in this field of study, (2) stimulate a longitudinal perspective to examine the malleability and impact of styles in occupational settings, (3) encourage a better contextualization of style research through field research and international comparative studies, and (4) replicate and extend findings of previous research using different style instruments. Together, these recommendations can stimulate further insights about the impact of the context on people with diverse cognitive styles, acting individually or in interaction with others, in diverse settings.

REFERENCES

Allinson, C.W., Armstrong, S.J., & Hayes, J. (2001). The effects of cognitive style on leader-member exchange: A study of manager-subordinate dyads. Journal of Occupational and Organizational Psychology, 74, 201-220.

Allinson, C.W., Chell, E., & Hayes, J. (2000). Intuition and entrepreneurial behavior. European Journal of Work and Organizational Psychology, 9, 31-43.

Allinson, C.W., & Hayes, J. (1996). The Cognitive Style Index: A measure of intuition-analysis for organizational research. Journal of Management Studies, 33, 119-135.

Allport, G.W. (1937). Personality: A psychological interpretation. New York: Holt & Co.

Alvi, S.A., Khan, S.B., Hussain, M.A., & Baig, T. (1988). Relationship between Holland's typology and cognitive styles. International Journal of Psychology, 23, 449-459.

Antonietti, A., & Gioletta, M.A. (1995). Individual differences in analogical problem solving. Personality and Individual Differences, 18, 611-619.

Aritzeta, A., Senior, B., & Swailes, S. (2005). Team role preference and cognitive styles: A convergent validity study. Small Group Research, 36, 404-436.

Armstrong, S.J. (2000). Individual differences in cognitive style and their potential effects on organizational behavior: A summary of recent empirical studies. In R.J. Riding & S.G. Rayner (Eds.), International perspectives on individual differences. Volume 1: cognitive styles (pp. 215-237). Stamford, CT: Ablex.

Armstrong, S.J, Allinson, C.W., & Hayes, J. (1997). The implications of cognitive style for the management of student-supervisor relationships. Educational Psychology, 17, 209-217.

Armstrong, S.J, Allinson, C.W., & Hayes, J. (2002). Formal mentoring systems: An examination of the effects of mentor/protégé cognitive styles on the mentoring process. Journal of Management Studies, 39, 1111-1137.

Armstrong, S.J, Allinson, C.W., & Hayes, J. (2004). The effects of cognitive style on research supervision: A study of student-supervisor dyads in management education. Academy of Management Learning and Education, 3, 41-63.

Armstrong, S.J., & Cools, E. (2009) Cognitive styles and their relevance for business and management: a review of development over the past two decades. In L.F. Zhang & R.J. Sternberg (Eds.), Perspectives on the nature of intellectual styles (pp. 253-290). New York: Springer.

Armstrong, S.J., & Hird, A. (2009). Cognitive style and entrepreneurial drive of new and mature business owner-managers. Journal of Business and Psychology, 24, 419-430.

Armstrong, S.J., & Priola, V. (2001). Individual differences in cognitive style and their effects on task and social orientations of self-managed work teams. Small Group Research, 32, 283-312.

Arthur, W., Jr., Bell, S.T., Villado, A.J., & Doverspike, D. (2006). The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. Journal of Applied Psychology, 91, 786-801.

Atwater, L.E., & Yammarino, F.J. (1993). Personal attributes as predictors of superiors and subordinates perceptions of military academic leadership. Human Relations, 46, 645-688.

Barbosa, S.D., Gerhardt, M.W., & Kickul, J.R. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. Journal of Leadership and Organisational Studies, 13, 86-104.

Baron, R.A. (2004). The cognitive perspective: A valuable tool answering entrepreneurship's basic "why" questions. Journal of Business Venturing, 19, 221-239.

Basadur, M., & Head, M. (2001). Team performance and satisfaction: A link to cognitive style within a process framework. Journal of Creative Behavior, 35, 227-248.

Belbin, R.M. (1981). Management teams: Why they succeed or fail. London: Heinemann.

Bennett, R.H., III, Pietri, P.H., Jr., & Moak, D.L. (1998). Personality profiles of today's and tomorrow's successful bankers. Journal of Retail Banking Services, 20, 5-12.

Berr, S.A., Church, A.H., & Waclawski, J. (2000). The right personality is everything: Linking personality preferences to managerial behaviors. Human Resource Development Quarterly, 11, 133-157.

Betsch, C., & Kunz, J.J. (2008). Individual strategy preferences and decisional fit. Journal of Behavioral Decision Making, 21, 532-555.

Blaylock, B.K. (1985). Risk perception: Evidence of an interactive process. Journal of Business Research, 13, 207-221.

Brigham, K.H., De Castro, J.O., & Shepherd, D.A. (2007). A person-organization fit model of owner-managers' cognitive style and organizational demands. Entrepreneurship Theory and Practice, 31, 29-51.

Buttner, E.H., & Gryskiewicz, N. (1993). Entrepreneurs' problem-solving styles: An empirical study using the Kirton Adaption/Innovation theory. Journal of Small Business Management, 31, 22-31.

Buttner, E.H., Gryskiewicz, N., & Hidore, S.C. (1999). The relationship between styles of creativity and managerial skills assessment. British Journal of Management, 10, 228-238.

Chan, D. (1996). Cognitive misfit of problem-solving style at work: A facet of person-organization fit. Organizational Behavior and Human Decision Processes, 68, 194-207.

Chang, J.Y., Choi, J.N., & Kim, M.U. (2008). Turnover of highly educated R&D professionals: The role of pre-entry cognitive style, work values and career orientation. Journal of Occupational and Organizational Psychology, 81, 299-317.

Cheng, M.M., Luckett, P.F., & Schulz, A.K.-D. (2003). The effects of cognitive style diversity on decision-making dyads: An empirical analysis in the context of a complex task. Behavioral Research in Accounting, 15, 39-62.

Chenhall, R., & Morris, D. (1991). The effect of cognitive style and sponsorship bias on the treatment of opportunity costs in resource allocation decisions. Accounting, Organizations and Society, 16, 27-46.

Chilton, M.A., Hardgrave, B.C., & Armstrong, D.J. (2005). Person-job cognitive style fit for software developers: The effect on strain and performance. Journal of Management Information Systems, 22, 193-226.

Church, A.H., & Waclawski, J. (1998). The relationship between individual personality orientation and executive leadership behaviour. Journal of Occupational and Organizational Psychology, 71, 99-125.

Clapp, R.G., & de Ciantis, S.M. (1989). Adaptors and innovators in large organizations: Does cognitive style characterize actual behavior of employees at work? An exploratory study. Psychological Reports, 65, 503-513.

Collins, A.R., White, B.J., & O'Brien, T.P. (1992).The relationship between cognitive style and selected characteristics of vocational education teachers. College Student Journal, 26, 167-173.

Cools, E., Armstrong, S.J., & Sadler-Smith, E. (2010). Methodological practices in the field of cognitive styles: A review study. In M.H. Pedrosa de Jesus, C. Evans, Z. Charlesworth & E. Cools (Eds.), Exploring styles to enhance learning and teaching in diverse contexts. Proceedings of the 15th annual conference of the European Learning Styles Information Network (ELSIN) (pp. 112-122). Aveiro, Portugal: University of Aveiro, Department of Education.

Cools, E., & Van den Broeck, H. (2007). Development and validation of the Cognitive Style Indicator. The Journal of Psychology, 141, 359-387.

Cools, E., & Van den Broeck, H. (2008a). Cognitive styles and managerial behaviour: A qualitative study. Education and Training, 50, 103-114.

Cools, E., & Van den Broeck, H. (2008b). The hunt for the Heffalump continues: Can trait and cognitive characteristics predict entrepreneurial orientation? Journal of Small Business Strategy, 18, 23-41.

Cools, E., Van den Broeck, H., & Bouckenooghe, D. (2009a). Cognitive styles and person-environment fit: Investigating the consequences of cognitive (mis)fit. European Journal of Work and Organizational Psychology, 18, 167-198.

Cools, E., Vanderheyden, K., & Horlait, M. (2009a). An inquiry on students' career preferences: Do cognitive styles matter? In Z.M. Charlesworth, C. Evans & E. Cools (Eds.), Learning in higher education – How style matters. Proceedings of the 14th European Learning Styles Information Network (ELSIN) conference (pp. 137-149). Bulle-en-Gruyère, Switzerland: Les Roches Gruyère, University of Applied Sciences.

Curry, L. (2000). Review of learning style, studying approach, and instructional preference research in medical education. In R.J. Riding & S.G. Rayner (Eds.), International perspectives on individual differences. Volume 1: Cognitive styles (pp. 239-276). Stamford, CT: Ablex.

D'Amato, A., & Zijlstra, F.R.H. (2008). Psychological climate and individual factors as antecedents of work outcomes. European Journal of Work and Organisational Psychology, 17, 33-54.

Dimov, D. (2007). From opportunity insight to opportunity intention: The importance of person-situation learning match. Entrepreneurship Theory and Practice, 31, 561-583.

Doucette, P.A., Kelleher, W.E., Murphy, H.J., & Young, J.D. (1998). Cognitive style and law students in Eastern Canada: Preliminary findings. College Student Journal, 32, 206-214.

Dutta, D.K., & Thornbill, S. (2008). The evolution of growth intentions: Toward a cognition-based model. Journal of Business Venturing, 23, 307-332.

Ehrhart, K.H., & Ziegert, J.C. (2005). Why are individuals attracted to organizations? Journal of Management, 31, 901-919.

Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiential and analytical-reasoning thinking styles. Journal of Personality and Social Psychology, 71, 390-405.

Filbeck, G., Hatfield, P., & Horvath, P. (2005). Risk aversion and personality type. Journal of Behavioral Finance, 6, 170-180.

Fisher, S.G., Macrosson, W.D.K., & Wong, J. (1998). Cognitive style and team role preference. Journal of Managerial Psychology, 13, 544-557.

Fox, F.V., & Straw, B.M. (1979). The trapped administrator: effects of job insecurity and policy resistance upon commitment to a course of action. Administrative Science Quarterly, 24, 449-471.

Foxall, G.R., & Hackett, P.M.W. (1994). Styles of managerial creativity: A comparison of Adaption-Innovation in the United Kingdom, Australia and the United States. British Journal of Management, 5, 85-100.

Gallén, T. (1997). The cognitive style and strategic decisions of managers. Management Decision, 35, 541-551.

Gallén, T. (2006). Managers and strategic decisions: Does the cognitive style matter? Journal of Management Development, 25, 118-133.

Gardner, W.L., & Martinko, M.J. (1996). Using the Myers-Briggs Type Indicator to study managers: A literature review and research agenda. Journal of Management, 22, 45-83.

Ginn, C.W., & Sexton, D.L. (1990). A comparison of the personality type dimensions of the 1987 Inc. 500 company founders/CEOs with those of slower-growth firms. Journal of Business Venturing, 5, 313-326.

Goldsmith, R.E., & Kerr, J.R. (1991). Entrepreneurship and adaption-innovation theory. Technovation, 11, 37-55.

Goodenough, D.R. (1985). Styles of cognitive personality functioning. In H.J. & D.A. Bownas (Eds.), Personality assessment in organizations. New York: Praeger.

Gridley, M.C. (2007). Differences in thinking styles of artists and engineers. The Career Development Quarterly, 56, 177-182.

Groves, K.S., Vance, C.M., Choi, D.Y., & Mendez, J.L. (2008). An examination of the nonlinear thinking style profile stereotype of successful entrepreneurs. Journal of Enterprising Culture, 16, 133-159.

Gul, F.A. (1983). A note on the relationship between age, experience, cognitive styles and accountants' decision confidence. Accounting and Business Research, 14, 85-88.

Gul, F.A. (1984). The joint and moderating role of personality and cognitive style on decision making. The Accounting Review, 59, 264-277.

Gul, F. (1986). Adaption-innovation as a factor inAustralian accounting undergraduates' subject interests and career preferences. Journal of Accounting Education, 4, 203-209.

Hammerschmidt, P.K. (1996). The Kirton Adaption Innovation and group problem solving success rates. Journal of Creative Behavior, 30, 61-74.

Hayes, J., & Allinson, C.W. (1994). Cognitive style and its relevance for management practice. British Journal of Management, 5, 53-71.

Hayes, J., & Allinson, C.W. (1998). Cognitive style and the theory and practice of individual and collective learning in organizations. Human Relations, 51, 847-871.

Hayley, U.C.V., & Stumpf, S.A. (1989). Cognitive trails in strategic decision making: Linking theories of personalities and cognitions. Journal of Management Studies, 26, 477-497.

Henderson, J.C., & Nutt, P.C. (1980). The influence of decision style on decision making behaviour. Management Science, 26, 371-386.

Hicks, E., Bagg, R., Doyle, W., & Young, J.D. (2007). Public accountants' field dependence: Canadian evidence. Perceptual and Motor Skills, 105, 1127-1135.

Hirsh, S.K., & Kummerow, J.M. (2000). Introduction to type in organisations. Palo Alto, CA: Consulting Psychologists Press.

Hmieleski, K.M., & Corbett, A.C. (2006). Proclivity for improvisation as a predictor of entrepreneurial intentions. Journal of Small Business Management, 44, 45-63.

Hodgkinson, G.P., & Clarke, I. (2007). Exploring the cognitive significance of organizational strategizing: A dual process framework and research agenda. Human Relations, 60, 243-255.

Hoffman, B.J., & Woehr, D.J. (2006). A quantitative review of the relationship between person-organization fit and behavioral outcomes. Journal of Vocational Behavior, 68, 389-399.

Holland, J. (1985). Making vocational choices: A theory of vocational personalities and work environments. Englewood Cliffs, NJ: Prentice Hall.

Hough, J.R., & ogilvie, dt (2005). An empirical test of cognitive style and strategic decision outcomes. Journal of Management Studies, 42, 417-448.

Hunt, R.G., Krzystofiak, F.J., Meindl, J.R., & Yousry, A.M. (1989). Cognitive style and decision making. Organizational Behavior and Human Decision Processes, 44, 436-453.

Huysmans, J.H.B.M. (1970). The effectiveness of the cognitive style constraint in implementing operations research proposals. Management Science, 17, 92-104.

Jackson, S. E., Joshi, A., & Erhardt, N. L. (2003). Recent research on team and organizational diversity: SWOT analysis and implications. Journal of Management, 29, 801-830.

Jansen, K.J., & Kristof-Brown, A. (2006). Toward a multidimensional theory of person-environment fit. Journal of Managerial Issues, 18, 193-212.

Järlström, M. (2000). Personality preferences and career expectations of Finnish business students. Career Development International, 5, 144-154.

Jung, C.G. (1923). Psychological types. London: Routledge & Kegan Paul.

Karn, J.S., Syed-Abdullah, S., Cowling, A.J., & Holcombe, H. (2007). A study into the effects of personality type and methodology on cohesion in software engineering teams. Behaviour and Information Technology, 26, 99-111.

Kaufmann, G. (1979). The explorer and the assimilator: A cognitive style distinction and its potential implications for innovative problem solving. Scandinavian Journal of Educational Research, 23, 101-108.

Kirton, M. (1976). Adaptors and innovators: A description and measure. Journal of Applied Psychology, 61, 622-629.

Kirton, M.J. (2003). Adaption-innovation in the context of diversity and change. London: Routledge.

Kirton, M.J., & de Ciantis, S.M. (1994). Cognitive style in organizational climate. In M.J. Kirton (Ed.), Adaptors and innovators: Styles of creativity and problem solving (pp. 72-90). New York: Routledge.

Kirton, M.J., & McCarthy, R.M. (1988). Cognitive climate and organizations. Journal of Occupational Psychology, 61, 175-184.

Ko, S. (2008). Do thinking styles of entrepreneurs matter in innovation? Journal of Global Business and Technology, 4, 24-33.

Kouzes, J.M., & Posner, B.Z. (2002). The leadership challenge (third edition). San Francisco, CA: Jossey-Bass.

Kozhevnikov, M. (2007). Cognitive styles in the context of modern psychology: Toward an integrated framework of cognitive style. Psychological Bulletin, 133, 464-481.

Leonard, N.H., Scholl, R.W., & Kowalski, K.B. (1999). Information processing style and decision making. Journal of Organizational Behavior, 20, 407-420.

Lewin, K. (1935). A dynamic theory of personality. New York: McGraw-Hill.

Martinsen, O. (1993). Insight problems revisited: The influence of cognitive styles and experience on creative problem solving. Creativity Research Journal, 6, 435-447.

Martinsen, O. (1995). Cognitive styles and experience in solving insight problems: Replication and Extension. Creativity Research Journal, 8, 291-298.

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. Journal of Management, 34, 410-476.

McElroy, T., & Seta, J.J. (2003). Framing effects: an analytic-holist perspective. Journal of Experimental Social Psychology, 39, 610-617.

McIntosh, M.J. (2005). Personality typology and thinking styles: Their role in framing and prospect theory. Advances in Consumer Research, 32, 253-254.

Miron, E., Erez, M., & Naveh, E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? Journal of Organizational Behavior, 25, 175-199.

Mitchell, R.K., Busenitz, L., Lant, T., McDougall, P.P., Morse, E.A., & Smith, H.B. (2002). Toward a theory of entrepreneurial cognition: rethinking the people side of entrepreneurship research. Entrepreneurship Theory and Practice, 27, 93-104.

Mitchell, T., & Cahill, A.M. (2005). Cognitive style and plebe turnover at the U.S. Naval Academy. Perceptual and Motor Skills, 101, 55-62.

Mohammed, S., & Schwall, A. (2009). Individual differences and decision making: What we know and where we go from here. International Review of Industrial and Organizational Psychology, 24, 249-312.

Murphy, H.J., Casey, B., Day, D.A., & Young, J.D. (1997). Scores on the Group Embedded Figures Test by undergraduates in information management. Perceptual and Motor Skills, 84, 1135-1138.

Myers, I.B., McCaulley, M.H., Quenk, N.L., & Hammer, A.L. (2003). MBTI manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.

Nordvik, H. (1996). Relationship between Holland's vocational typology, Schein's career anchors and Myers-Briggs' types. Journal of Occupational and Organizational Psychology, 69, 263-275.

Nutt, P.C. (1990). Strategic decisions made by top executives and middle managers with data and process dominant styles. Journal of Management Studies, 27, 173-194.

Olson, P.D. (1985). Entrepreneurship: process and abilities. Entrepreneurship Theory and Practice, 10, 25-32.

Parkinson, J., & Taggar, S. (2007). Jobs and careers: Earning and outgoing. Financial Management, July/August, 55-57.

Peterson, E.R., Rayner, S.G., & Armstrong, S.J. (2009). Herding cats: in search of definitions of cognitive styles and learning styles. ELSIN Newsletter, an international forum, Winter 2008-2009, 10-12. Retrieved from http://www.elsinnews.com at June 15, 2010.

Podsakoff, P.M., MacKenzie, S.B., Bachrach, D.G., & Podsakoff, N.P. (2005). The influence of management journals in the 1980s and 1990s. Strategic Management Journal, 26, 473-488.

Priola, V., Smith, J.L., & Armstrong, S.J. (2004). Group work and cognitive style: a discursive investigation. Small Group Research, 35, 565-595.

Rajagopalan, N., Rasheed, A.M.A., & Datta, D.K. (1993). Strategic decision processes: Critical review and future directions. Journal of Management, 19, 349-384.

Rayner, S., & Peterson, E.R. (2009). Reaffirming style as an individual difference: toward a global paradigm or knowledge diaspora? In L.F. Zhang & R.J. Sternberg (Eds.), Perspectives on the nature of intellectual styles (pp. 107-137). New York: Springer.

Riding, R., & Cheema, I. (1991). Cognitive styles: an overview and integration. Educational Psychology, 11, 193-215.

Riding, R., & Rayner, S. (1998). Cognitive styles and learning strategies: understanding style differences in learning and behaviour. London: Fulton.

Sadler-Smith, E. (1998). Cognitive style: Some human resource implications for managers. International Journal of Human Resource Management, 9, 185-202.

Sadler-Smith, E. (2004). Cognitive style and the management of small and medium-sized enterprises. Organization Studies, 25, 155-181.

Sadler-Smith, E. (2009). A duplex model of cognitive style. In L.F. Zhang & R.J. Sternberg (Eds.), Perspectives on the nature of intellectual styles (pp. 3-28). New York: Springer.

Sadler-Smith, E., & Badger, B. (1998). Cognitive style, learning and innovation. Technology Analysis and Strategic Management, 10, 247-265.

Schein, E.H. (1990). Career anchors: discovering your real values. San Diego, CA: Pfeiffer and Company.

Scott, S.G., & Bruce, R.A. (1995). Decision-making style: The development and assessment of a new measure. Educational and Psychological Measurement, 55, 818-831.

Shiloh, S., Salton, E., & Sharabi, D. (2002). Individual differences in rational and intuitive thinking styles as predictors of heuristic responses and framing effects. Personality and Individual Differences, 32, 415-429.

Singer, M. (1990). Individual differences in adaption-innovation and the escalation of prediction paradigm. The Journal of Social Psychology, 130, 561-563.

Sternberg, R.J. (1997). Thinking styles. Cambridge: Cambridge University Press.

Sternberg, R.J., & Grigorenko, E.L. (1997). Are cognitive styles still in style? American Psychologist, 52, 700-712.

Stewart, W.H., Jr., Watson, W.E., Carland, J.C., & Carland, J.W. (1998). A proclivity for entrepreneurship: A comparison of entrepreneurs, small business owners, and corporate managers. Journal of Business Venturing, 14, 189-214.

Streufert, S., & Nogami, G.Y. (1989). Cognitive style and complexity: Implications for I/O psychology. In C.L. Cooper & I. Robertson (Eds.), International review of industrial and organizational psychology (pp. 93-143). Chichester: Wiley.

Stumpf, S.A., & Dunbar, L.M. (1991). The effects of personality type on choices made in strategic decision situations. Decision Sciences, 22, 1047-1072.

Suazo, M.M., Turnley, W.H., & Mai-Dalton, R.R. (2008). Characteristics of the supervisor-subordinate relationship as predictors of psychological contract breach. Journal of Managerial Issues, 20, 295-312.

Suedfeld, P., & Tetlock, P.E. (2001). Individual differences in information processing. In A. Tesser & N. Schwarz (Eds.), Blackwell handbook of social psychology: Intraindividual processes (pp. 284-304). Malden, MA: Blackwell.

Sullivan, B.A., & Hansen, J.C. (2004). Mapping associations between interests and personality: Toward a conceptual understanding of individual differences in vocational behavior. Journal of Counselling Psychology, 51, 287-298.

Tullett, A.D. (1997). Cognitive style: Not culture's consequence. European Psychologist, 2, 258-267.

van Knippenberg, D., & Schippers, M.C. (2007). Work group diversity. Annual Review of Psychology, 58, 515-541.

Vance, C.M., Groves, K.S., Paik, Y., & Kindler, H. (2007). Understanding and measuring linear and non-linear thinking style for enhanced management education and professional practice. Academy of Management Learning and Education, 6, 167-185.

Verquer, M.L., Beehr, T.A., & Wagner, S.H. (2003). A meta-analysis of relations between person-organization fit and work attitudes. Journal of Vocational Behavior, 63, 473-489.

Volkema, R.J., & Gorman, R.H. (1998). The influence of cognitive-based group composition on decision-making process and outcome. Journal of Management Studies, 35, 105-121.

Walsh, J.S., & Anderson, P.H. (1995). Owner-manager adaption/innovation preference and employment performance: A comparison of founders and non-founders in the Irish small firm sector. Journal of Small Business Management, 33, 1-8.

Westerman, J.W., & Cyr, L.A. (2004). An integrative analysis of person-organization fit theories. International Journal of Selection and Assessment, 12, 252-261.

White, K.B. (1984). MIS project teams: An investigation of cognitive style implications. MIS Quarterly, 8, 95-101.

Whooten, K.C., Barner, B.O., & Silver, N.C. (1994). The influence of cognitive style upon work environment preferences. Perceptual and Motor Skills, 79, 307-314.

Witkin, H.A., & Goodenough, D.R. (1977). Field dependence and interpersonal behavior. Psychological Bulletin, 84, 661-689.

Witkin, H.A., Moore, C.A., Goodenough, D.R., & Cox, P.W. (1977). Field-dependent and field-independent cognitive styles and their educational implications. Review of Educational Research, 47, 1-64.

Witkin, H.A., Oltman, P.K., Raskin, E., & Karp, S.A. (1971). A manual for the Embedded Figures Test. Palo Alto, CA: Consulting Psychologists Press.

Wong, K.F.E., Kwong, J.Y.Y., & Ng, C.K. (2008). When thinking rationally increases biases: The role of rational thinking style in escalation of commitment. Applied Psychology: An International Review, 57, 246-271.

Zhang, L.F., & Sternberg, R.J. (Eds.) (2009). Perspectives on the nature of intellectual styles. New York: Springer.

FIGURE 1

OVERALL FRAMEWORK
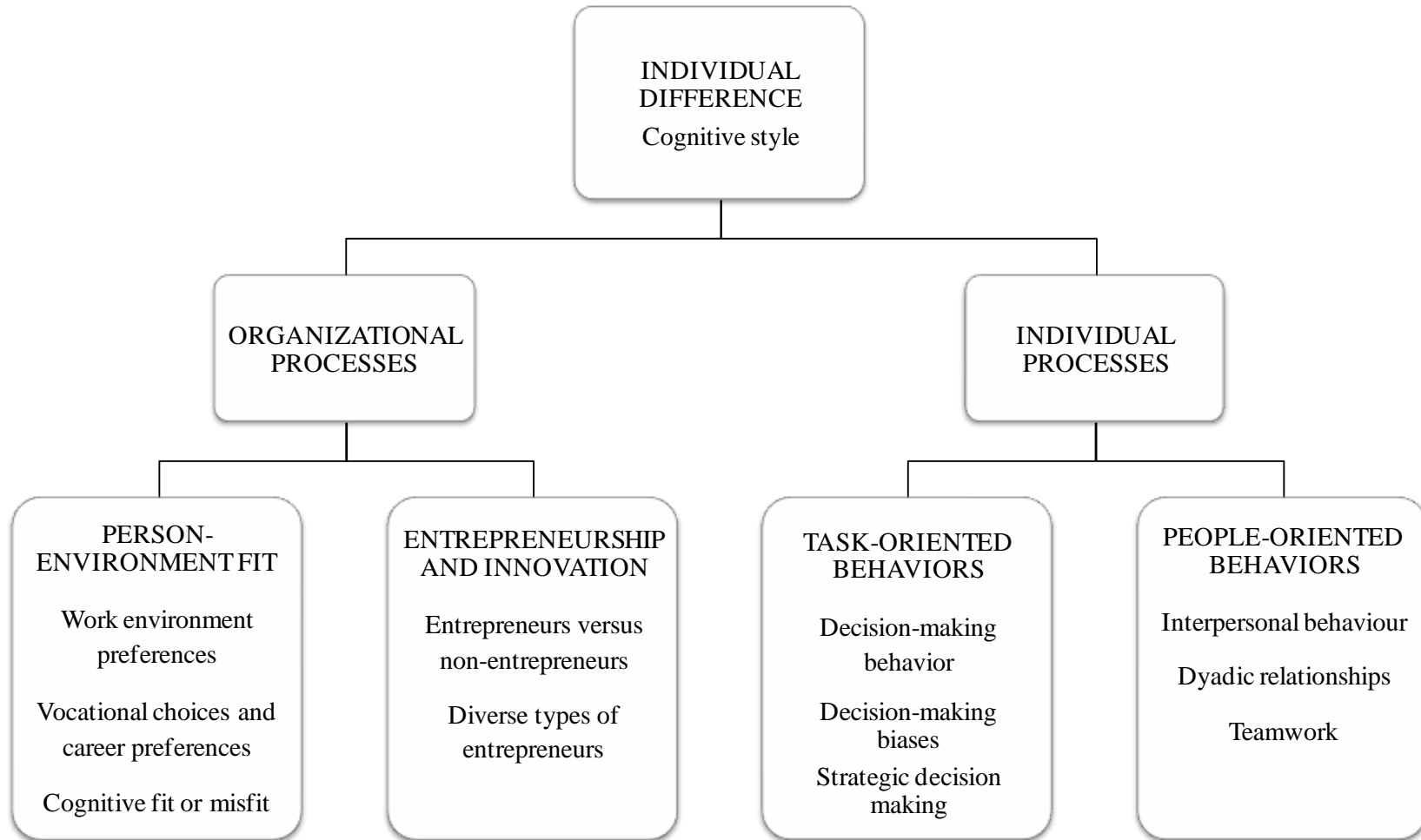
APPENDIX

SUMMARY OF USED STYLE LABELS WITHIN THIS REVIEW ON APPLICATIONS OF STYLES IN THE WORKPLACE

Measure	Dimensions	Description
Cognitive Style Index (CSI) *(Allinson & Hayes, 1996)*	Analysis–Intuition	*Analysis* is characterized by judgment based on mental reasoning and a focus on detail. *Intuition* refers to immediate judgment on the basis of feeling and a global perspective.
Cognitive Style Indicator (CoSI) *(Cools & Van den Broeck, 2007)*	Knowing style	The *knowing style* refers to a preference for a rational, logical, impersonal way of information processing.
	Planning style	The *planning style* implies a preference for a structured, organized, efficient way of information processing.
	Creating style	The *creating style* refers to a preference for a creative, flexible, unconventional information-processing approach.
Group Embedded Figures Test (GEFT) *(Witkin, Oltman, Raskin, & Karp, 1971)*	Field (in)dependence	Related to a global versus analytical way of perceiving. Entails the ability to perceive items without being influenced by the background. *Field independent* people are characterized as analytical, self-referent, and impersonal in orientation, while *field dependents* are seen as global, socially sensitive, and interpersonal in orientation.
Kaufmann assimilator-explorer style inventory *(Kaufmann, 1979)*	Assimilator–Explorer	Related to individual preferences to seek familiarity or novelty in the process of problem solving and creativity.
Kirton Adaption-Innovation Inventory (KAI) *(Kirton, 1976)*	Adaption–Innovation	Refers to people's tendency to 'do things better' versus 'do things differently' when solving problems. *Adaptors* turn to established procedures, while *innovators* prefer restructuring problems and approaching them from different angles.
Linear/Non-Linear Thinking Styles Profile (LNTSP) *(Vance, Groves, Paik, & Kindler, 2007)*	Linear–Nonlinear thinking	*Linear thinkers* prefer making decisions from external data, information, and facts. *Nonlinear thinkers* use internal feelings, impressions, and sensations.

Measure	Dimensions	Description
Myers-Briggs Type Indicator (MBTI) *(Myers, McCaulley, Quenk, & Hammer, 2003)*	Extraversion–Introversion	*Extraversion* means operating in the external world of behavior, action, people, and things. *Introverts* have a focus on the internal world of ideas and reflection.
	Sensing–Intuition	*Sensing* people are more likely to trust information that is in the present, tangible, and concrete. *Intuitives* tend to trust information that is more abstract or theoretical.
	Thinking–Feeling	*Thinkers* tend to decide things from a more detached standpoint, using logic. *Feeling people* come to decisions by empathizing with the situation and using consensus.
	Judgment–Perception	*Judging people* prefer planning and organization, while *perceivers* adhere to a more flexible approach.
Rational-Experiential Inventory (REI) *(Epstein, Pacini, Denes-Raj, & Heier, 1996)*	Rationality-Experientiality	*Rationality* refers to a preference for analytical, rational processing, while *experientiality* describes intuitive, experiential processing.
Thinking Style Inventory (TSI) *(Sternberg, 1997)*	Theory of Mental Self-Government	Functions: *Legislative people* are very independent and decide how to do things on their own. *Executive individuals* like to follow the rules and go along with pre-established systems. *Judicial people* test whether pre-established rules and systems are necessary or valid.
		Forms: The *monarchic* is someone who is single-minded and focused on solving problems. *Hierarchical individuals* set priorities and understand that not all goals can be fulfilled. *Oligarchic people* can multitask but struggle with how to organize their priorities. *Anarchic individuals* are motivated by their specific needs and construct their own systems rather than follow established systems.
		Level: *Globals* are dreamers that prefer tackling ill-defined and abstract problems. *Local individuals* prefer to work on well-defined problems and lose sight of the bigger picture.
		Scope: *Internals* are introspective and prefer to work alone; *external people* are extraverted, outgoing and prefer to work collaboratively.
		Leanings: *Liberal people* are willing to go beyond existing rules and procedures, to maximize change, and to seek situations that are somewhat ambiguous; *Conservative individuals* like to follow the rules and avoid ambiguous situations where possible.