

DISSERTATION

TOWARD A THEORY OF DEVELOPMENT INVOLVEMENT: UNDERSTANDING
READINESS TO DEVELOP

Submitted by

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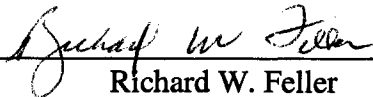
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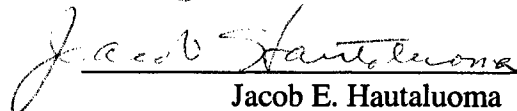
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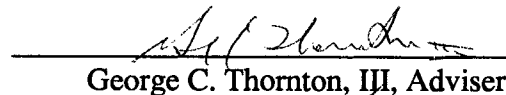
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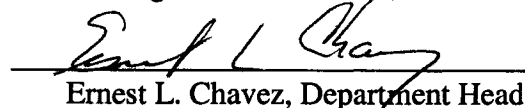
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ABSTRACT OF DISSERTATION

TOWARD A THEORY OF DEVELOPMENT INVOLVEMENT: UNDERSTANDING READINESS TO DEVELOP

This study presents an integrative theoretical framework for understanding the relationship between some individual difference variables and developmental involvement behaviors. It posits that a learning and development orientation, measured by a construct called readiness to develop, mediates the relationship between specific individual-difference variables and development participation. The nomological network of readiness to develop is presented and some of the proposed associations are empirically investigated.

A developmental assessment center program was designed and utilized to gather data over a two-year period. Consistent with previous research, the results illustrate that openness to experience and extraversion significantly influence an individual's level of readiness to develop. The findings also show that readiness to develop predicts development activity, as measured through a follow-up evaluation, four months post-assessment. The criteria for testing the general hypothesis, that readiness to develop mediates the relationship between the individual-difference

variables and development participation, were not met. Both the theoretical and practical implications of the findings are discussed.

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CHAPTER 1

INTRODUCTION

The changing nature of work is altering the way organizations and employees are approaching learning and development. Organizational trends such as globalization, competition, technological innovation, downsizing, increasing use of teams, and an increase in skill demand are shifting the responsibility of development to the individual employee (London & Mone, 1999; Maurer & Tarulli, 1994; McCauley & Hezlett 2001). It is becoming increasingly evident that employees must engage in voluntary development and continuous learning strategies to facilitate career advancement and the effectiveness of the organization (London & Mone, 1999; Maurer, 2002; Maurer & Tarulli, 1994; McCauley & Hezlett, 2001; Noe, Wilk, Mullen, & Wanek, 1997;). The need for employees to continuously renew and enhance their knowledge, skills, and abilities to successfully perform on the job is transforming training from a static to a dynamic process in which individuals must play a more active role.

It is no longer acceptable for the organization to just offer training programs; employees must be proactive and engage themselves in the learning process. The success of development programs is influenced by the interest and participation levels of the employees (Maurer, 2002). Participation in development programs will have a

higher success rate for those employees who actively seek out and embrace opportunities than for those who are placed into programs by the organization. This transformation regarding how learning and development is viewed suggests that more attention needs to be focused on understanding individuals' approach to development in the workplace (McCauley & Hezlett, 2001). Therefore, the purpose of this study is to identify factors that influence an individual's decision to seek-out and participate in developmental activities, and to introduce an individual difference variable to predict developmental involvement.

Self-Development: Understanding Self-Directed Learning

Voluntary employee development can best be described as self-directed learning and differentiated from required training that organizations mandate for new employees through a development program. Tharenou (1997) suggested that the antecedents of traditional human resource training approaches and self-directed development need to be examined separately and should differ from one another. While training involves specific localized events, development takes more of a long-term perspective deriving into career progress (Noe et al., 1997).

Self-directed, continuous learners exhibit specific development behaviors that are organized and guided by the individual. Such learners consistently search for new information about themselves and compare that information to future job requirements (London & Mone, 1999). Individuals engaging in self-directed development to update or enhance their skills employ a variety of behaviors. Typical development behaviors involve many forms of learning and training such as reading

books, participating in training courses, finding mentors, modeling behaviors of others, watching videotapes, taking computer-based training programs, setting goals for improvement, accepting challenging job assignments, seeking feedback from others, or attending seminars (Birdi, Allan, & Warr, 1997; London & Mone, 1999; Noe & Wilk, 1993; Simmering, Colquitt, Noe, & Porter, 2003).

While self-directed development is a means by which employees can improve their skills, research has found that organizations also benefit from offering developmental opportunities. Development activities may be associated with several significant organizational outcome variables such as higher retention rates (Kaye & Jordan-Evens, 2000; Lund & Borg, 1999; Maurer, Weiss, & Barbeite, 2003), organizational commitment (Colquitt, LePine, & Noe, 2000; Mathieu & Zajac, 1990; Mikkelsen, Saksvik, Eriksen, & Ursin, 1999), job satisfaction (Mikkelsen et al., 1999) and financial performance (Ellinger, Ellinger, Yang, & Howton, 2002). Thus, it is evident that both the individual and the organization will benefit from employees engaging in developmental activities.

The purpose of this study was to introduce and define an individual-difference variable, called Readiness to Develop (RTD), and to validate a measure of the construct. To accomplish these goals, RTD was placed in a theoretical model of various individual-difference characteristics and contextual variables that are conceptually related to self-directed development. Then, a self-report measure of RTD was validated. A variety of evidence to support the validity of the RTD measure was then gathered and evaluated in the context of a developmental assessment center.

Theoretical Grounding: Identifying A Model

It has been noted in the literature that there is wide variation in the degree to which employees show interest in developmental activities (London & Smither, 1999a; Maurer, 2002; Maurer & Tarulli, 1994). Some workers consistently pursue developmental and learning activities, whereas others don't acknowledge the importance of them (Maurer, 2002). To understand the differences between these diverse orientations, and have the ability to predict future developmental behavior, it is necessary to examine both individual differences and the work context. Several streams of research have focused on establishing both the personal and situational variables that influence self-directed development. Personal attributes include self-efficacy (Colquitt et al., 2000), goal-orientation (Colquitt & Simmering, 1998; Fisher & Ford, 1998), conscientiousness (Simmering et al., 2003), motivation (Birdi et al., 1997; Noe & Wilk, 1993; Maurer & Tarulli, 1994), attitudes toward development (Maurer & Tarulli, 1994; Noe & Wilk, 1993; Tharenou, 1997), age (Cleveland & Shore, 1992; Colquitt et al., 2000), education (Birdi et al., 1997; Tharenou, 1997), and work tenure and management level (Birdi et al., 1997; Noe & Wilk, 1993; Tharenou, 1997). Situational characteristics include supervisor and organizational support (Birdi et al., 1997; Noe, 1996; Noe & Wilk, 1993), person-organizational fit (Simmering et al., 2003), and peer support for development (Maurer & Tarulli, 1994).

It must be recognized when discussing an employee's orientation towards self-development, that this topic has been given plenty of attention from researchers across assorted fields of study. Various constructs have been proposed to account for this individual-difference characteristic throughout the literature. In his review,

Maurer (2002) identified several related constructs that have appeared over the years that include a dimension of “career resilience” (London, 1983), “updating orientation” (Kozlowski & Farr, 1988), “motivation to learn” (Noe, 1986), “personal mastery” (Senge, 1990), and “growth needs” (Cherrington, 1991). Maurer (2002) notes that while many of these constructs present good theories and related research, there are two concerns that need to be addressed. First, the literature regarding these constructs is scattered and needs to be integrated (Maurer, 2002). Secondly, the existing constructs have not been “clearly articulated in terms of psychological content, structure, and process” (Maurer, 2002, p. 11). Therefore, the RTD construct attempts to address some of these concerns and present some of the underlying variables related to a development orientation.

Theoretically, a conceptual model of RTD would illustrate a broad framework for incorporating a range of variables that have been identified throughout various studies. This includes the previously mentioned personal attributes as well as factors such as dependency, self-monitoring, and conformity. The theoretical RTD model incorporates and builds on ideas suggested by Maurer (2002) relating to his theory of an employee learning and development orientation (ELDO). The ELDO framework integrates multiple theoretical elements from existing theory and empirical support. The model draws on well-established theoretical frameworks from literature on training and development, job design, career development, motivation, personality, and social psychology (Maurer, 2002).

Previous research suggests that to predict employee behavior, both the person and the situation must be examined (Simmering et al., 2003). Therefore, while the

person-side is accounted for by RTD, situational factors also need to be addressed. In the conceptual model, the relationship between RTD and developmental involvement is moderated by situational variables. A moderator is a variable that affects the direction or strength of a relationship between an independent variable and a dependent variable (Baron & Kinney, 1986). Research has investigated several contextual factors that may fill the roles of moderator variables including development resources, organizational support, job characteristics, and autonomy. While moderator variables are important aspects of a conceptual RTD model, they are not investigated in the current study. Other research (Maurer, 2002; Maurer, Weiss, & Barbeite, 2003; Noe & Colquitt, 2002) has presented well-organized theories and empirical investigations of contextual variables in two general categories: job-level factors and organizational-level factors.

Job-level factors that are proposed to moderate the relationship between RTD and development intentions include: skill level, autonomy, job level, job complexity, role-clarity, and person-job fit. Organizational-level factors influencing the relationship include perceived work environment variables such as organizational support, resources available, person-organization and person-environment fit, and supervisor support. Organizational characteristics, such as industry, public or private, and size, are also considered important organizational level factors.

While a theoretical nomological network of RTD can propose various relationships between RTD and related factors, as well as moderating effects of the situational variables described, only a small number of these relationships could be tested in this study. Measurement restrictions during the research allowed for only the

personality and goal-orientation measures to be administered. Therefore, Figure 1 presents the relationships proposed above that could be examined in this study.

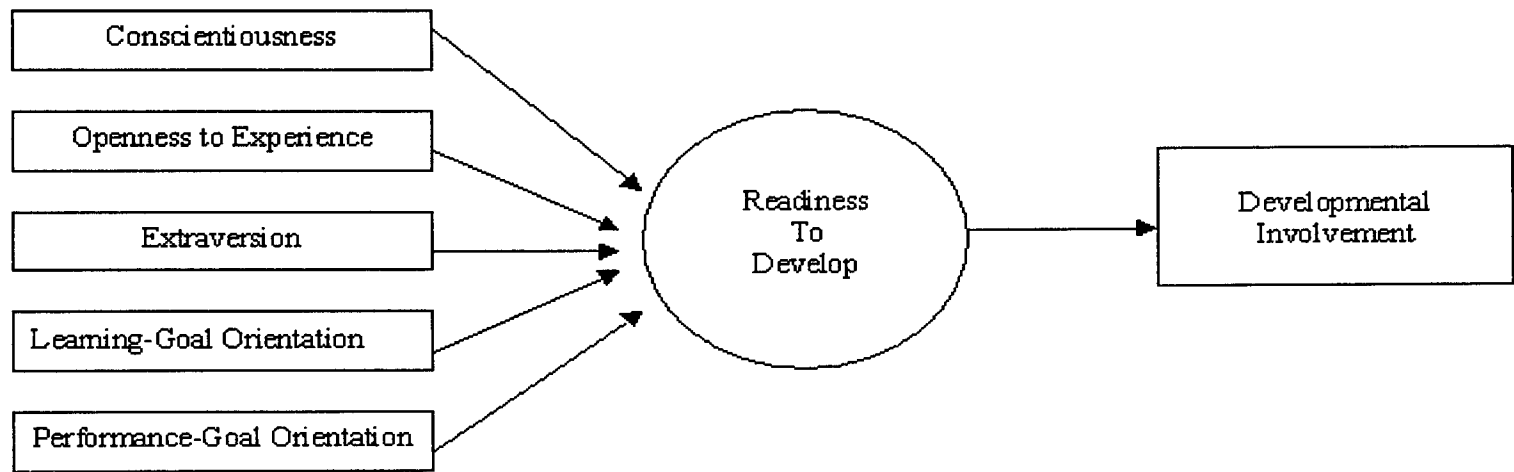


Figure 1
Empirically Tested RTD Model

A key component of the proposed RTD model is that RTD mediates the relationship between the various individual-difference variables and developmental involvement. That is, several individual-difference variables, such as conscientiousness, openness to experience, and learning-goal orientation collaborate to influence an individual's level of RTD. The degree of RTD that an individual holds then influences the amount of developmental involvement they exhibit.

An understanding of the RTD construct and its correlates will have both theoretical and practical implications. First, the theoretical benefit of attaining a conceptual understanding of RTD allows for the processes that facilitate individual's developmental involvement to be more methodically studied and understood. That is, a conceptual framework of RTD and its correlates will help researchers understand and investigate the relevant variables that facilitate developmental readiness. The potential practical implication of RTD may be its ability to predict the developmental activity of individuals. Practitioners can use the construct to design development programs and initiatives in conjunction with the proclivity of individual employees.

Readiness to Develop: Understanding the Construct

RTD is defined as an individual's orientation to seek-out and participate in developmental activities. An individual high on RTD accepts feedback from others in non-defensive way, expresses interest in personal growth and improvement in job performance, seeks feedback about own job performance and suggestions for improvement, explores options for learning new job-related skills, and participates in

activities to improve one's knowledge, skills, abilities, and other job-related characteristics.

RTD is an individual-level construct characterized by a self-directed behavioral orientation for development, in which development is defined as the learning of new skills or a new level of existing skills (Maurer, 2001). A development orientation is characterized by a lasting direction of thought or interest in career or continuous learning. Within this context, RTD is related to the rate of participation and level of involvement in developmental activities. Developmental involvement is considered a choice behavior that is fundamentally different from performance. In other words, RTD may not necessarily predict performance, learning, or transfer of development content, only participation in developmental activities. This research hypothesizes that an individual that holds a higher level of RTD will participate in more developmental activities than an individual low in RTD.

Theoretically, individuals' degree of RTD should remain relatively stable over time. The difference between RTD and more stable individual-difference variables, such as personality, is that RTD is influenced more by immediate life experiences and personal factors. A shift in an individual's cognitive, affective, or behavioral evaluative response from a personal experience or event could alter the level of RTD. Research has shown that several of the correlates of RTD, such as self-efficacy, goal-orientation, and attitudes toward development, which are hypothesized to influence individual levels of RTD, are dynamic and can change over time (Gist & Mitchell, 1992; Kozlowski, Gully, Brown, Salas, Smith, & Nason, 2001; Maurer, 2001; Maurer, 2002; Maurer et al., 2003). For example, if an individual's confidence in his

or her abilities is enhanced after the successful completion of a difficult assignment, it is also likely that their RTD will increase.

Maurer (2002) defined an orientation as an individual's position relative to an object that can be characterized by three components: affective, cognitive, and behavioral. The cognitive category contains thoughts, which are often conceptualized as beliefs, about the orientation object. In general, individual's who evaluate the object optimistically tend to associate positive characteristics with it. Thus, individual's who have a positive cognitive evaluative response to development will possess a higher level of RTD. Several individual-difference variables examined in the training and development literature fall into the cognitive category, including goal orientation, general self-efficacy, metacognitions, and implicit learning theories (Maurer, 2002). Responses considered in the affective group consist of feelings, emotions, and moods toward the object. Similar to the cognitive reactions, affective responses can vary widely on a positive to negative continuum. Individual difference variables considered in the affective category include positive and negative affectivity, and job attitudes.

Individuals who have positive evaluative responses to the object tend to exhibit behaviors associated with supporting that object. For example, if an individual evaluates development favorability, he or she will engage in behaviors such as searching for a new training class to attend or asking for additional performance feedback. On the other hand, if the individual views development negatively, he or she may skip a needed training course or push aside a performance review. Maurer (2002) identified two behaviors as comprising the behavioral category, development

participation and persistence during past experiences, both of which should influence RTD.

While the affective, behavioral, and cognitive components are conceptually separable, they should be linked causally (Fiske & Kinder, 1981). That is, stronger beliefs regarding development will result in more potent affective reactions and facilitate associated developmental behaviors. Figure 1 lists the components of the RTD model and how various individual difference constructs are placed in the nomological network with RTD. Due to limitations restricting the number of variables that could be measured, this study was able to examine the relationship between RTD and only a subset of other correlates that include specific personality constructs, and goal-orientation. Maurer (2002) captured some similar points, and provided a more extensive theoretical groundwork and supplemental model, which includes several ideas outside the scope of this paper.

Collecting Validity Evidence

According to *The Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education 1999), validation efforts are “viewed as developing a scientifically sound validity argument to support the intended interpretation of test scores and their relevance to the proposed use” (p. 9). Thus, validity is viewed as all accumulated evidence that supports the intended use and interpretation of the construct the test is designed to measure (AERA et al., 1999). This accumulation can consist of evidence based on test content, response

processes, internal structure, relation to other variables, and consequences of testing (AERA et al., 1999). Given the theoretical conceptualization of the nomological network of RTD presented above, the goal of this study was to accumulate validity evidence through empirical examination. Various types of evidence were integrated to make a validity argument to support the hypothesized model for the posited relationships.

In the analyses that follow, three main objectives were addressed to evaluate the validity evidence based on internal structure and evidence based on relations to other variables. First, the internal structure of the test used to measure RTD was examined to evaluate the relationships among the test items. The RTD measure should have a single dimension and thus, according to the Standards (AERA et al., 1999), also provide an estimate of test score reliability. Secondly, as described by the Standards (AERA et al., 1999), convergent relationships with other similar constructs are another type of validity evidence that can be gathered. Therefore, evidence was collected to examine RTD's relationship with other theoretically related individual difference variables. Finally, test-criterion relationships are a third type of evaluation suggested by the Standards (AERA et al., 1999) as a potential source of validity evidence. Thus, a predictive validity analysis was conducted to test RTD's ability to predict developmental involvement using four criterion measures.

Correlates Of Readiness to Develop

One of the goals of this research was to examine RTD's relationship with some of the proposed correlates identified in the model. Although both previous research and the current model present numerous correlates that influence RTD, measurement restrictions and practical constraints in the research setting only allowed for a select few to be examined. The variables that were examined in this study included performance- and learning-goal orientation, conscientiousness, extraversion, and openness to experience.

Goal Orientation

Goal orientation refers to the type of goal set by an individual within a learning context, and has surfaced as a prominent influence in the development literature (Kozlowski et al., 2001). Dweck (1999) identified two different strategies that an individual will choose between when setting learning goals, performance-orientation and learning-orientation. Individuals with a learning-orientation will be attracted to novel and challenging assignments and approach them with the intent to improve their abilities. For an individual with a learning-orientation, the goal is to master new things and find learning strategies that work (Dweck, 1999). These individuals view their skills and abilities as malleable and believe that learning effort will result in self-improvement. This view leads these individuals to be persistent in the face of failures, remain focused on the task, and continue to work on their

learning strategy (Dweck, 1999; Kozlowski et al., 2001). In other words, individuals with a learning-orientation view challenging situations as an opportunity for growth and development.

In contrast, individuals with a performance-orientation seek out situations that guarantee success and positive evaluations from others, while avoiding negative judgments. They evaluate their performance relative to others and only seek to perform better than their comparison group, not concerning themselves with actual learning. They do not believe their capabilities are malleable, but more stable. Thus, any failure or negative evaluation reflects directly on the self. In the face of failure, individuals with a performance-orientation will criticize their ability and start to give up on the task at hand (Dweck, 1999).

Goal orientation has been identified as an important individual difference variable and related to several learning and development outcomes throughout the research literature. Specifically, learning-orientation has been associated with seeking feedback (Vandewalle & Cummings, 1997), increased effort (Button, Mathieu, & Zajac, 1996), motivation to learn (Colquitt & Simmering, 1998) a focus on development and skill improvement (Brett & Vandewalle, 1999), and performance in a learning environment (Fisher & Ford, 1998). Performance-orientation has been associated with more negative effects including a tendency to avoid challenging task (Phillips & Gully, 1997), lower motivation to learn (Colquitt & Simmering, 1998) avoid demonstrating incompetence (Brett & Vandewalle, 1999), and reactions to failure with lower self-efficacy (Phillips & Gully, 1997).

Because individuals who hold a learning-orientation believe their capabilities are malleable and can be changed with effort, and seek challenging situations with the goal of self-improvement, this research proposes that individuals with a high learning orientation will hold a higher level of RTD compared to those with a lesser learning-orientation. That is, individuals with a higher learning-orientation are more likely to monitor their abilities in relation to their needs, and seek to close the gap through development. Therefore, it is posited in this model that a learning-orientation will have a direct positive influence on an individual's RTD level.

Hypothesis 1a: Learning-orientation will have a significant positive relationship with RTD.

In contrast, because individuals with a high performance-orientation seek to avoid challenging and novel situations, and development was defined as learning new skills, this research hypothesizes that individual's high in performance-orientation will have a lower RTD than those with a low performance-orientation. In other words, because a strong performance-orientation will lead an individual away from a challenging developmental opportunity, performance-orientation should have a direct negative relationship with RTD.

Hypothesis 1b: Performance-orientation will have a significant negative relationship with RTD.

Personality Variables

Over the past decade, personality variables have been found to be reliable predictors of employee behavior across a wide variety of context and have thus become an important area of study (Mount & Barrick, 1995, Mount, Barrick, & Stewart, 1998, Murphy, 1996). Research has linked personality factors such as conscientiousness, openness to experience, and extraversion to numerous criteria such as job performance, training motivation, job satisfaction, training performance, and teamwork. Therefore, these three facets of the Five Factor Model (McCrae & Costa, 1987) have been included in this framework and are hypothesized to have a direct association with RTD.

Conscientiousness. The conscientiousness facet of the Five Factor Model has received the most attention from researchers examining the relationship between personality and work behavior. Conscientiousness is associated with characteristics such as dependability, achievement oriented, responsible, and persistent. Thus, it has extensive applicability in the work environment and is possibly the most important noncognitive predictor for employee behavior (Landy, 2003). Employees who approach development in a conscientious manner, that is carefully and with persistence, should benefit more from the opportunity (Barrick & Mount, 1991). Therefore, a conscientious individual should surpass less conscientious peers at self-directed development, which requires an individual to initiate and persist with their development intentions. It is expected that conscientiousness has a direct influence on RTD.

Hypothesis 1c: Conscientiousness will have a significant positive relationship with RTD.

Openness to Experience. While conscientiousness has garnered most of the attention given to personality variables, openness to experience has recently begun to attract some consideration itself, especially in the training literature (Barrick, Mount, & Judge, 2001; Colquitt et al., 2000, De Jong, Van der Velde, & Jansen, 2001). Openness to experience is associated with attributes such as imaginative, curious, independent, and intelligent. Individuals who are high in openness to experience are open-minded and motivated by a need for understanding and change (McCrae, 1993). They possess a strong intellectual curiosity and seek-out novel experiences. Barrick and Mount (1991) found that individuals high in openness to experience were more successful in training situations, possibly because they are more motivated to engage in the self-directed assessment needed for learning and they hold more positive attitudes about learning (Barrick & Mount, 1991; LePine, Colquitt, & Erez, 2000). Thus, it is expected that openness to experience also has a direct relationship with RTD.

Hypothesis 1d: Openness to experience will have a significant positive relationship with RTD.

Extraversion. Similar to openness to experience, extraversion is gaining research interest from personality researchers as it relates to work behavior (Barrick

et al., 2001; Colquitt et al., 2000). Extraverted individuals are sociable, assertive, active, ambitious, and energetic. These characteristics would be beneficial for developmental readiness through two distinct channels. First, individuals who are more energetic and assertive are going to be more motivated to seek-out learning and developmental activities themselves. That is, they are going to be go-getters, and inspired to narrow their ability gaps. Secondly, extraverts are more sociable and able to build working relationships with others easier than introverts. Therefore, individual's high in extraversion are more likely to get feedback and discuss development issues with others. Supportive relationships generate the opportunity to develop in an environment where individual are not afraid to take on risky and challenging assignments, and can count on the support and resources of others (London & Smither, 1999a). Thus, it is hypothesized that extraversion should have a direct influence on RTD.

Hypothesis 1e: Extraversion will have a significant positive relationship with RTD.

Test-Criterion Relationships

Evidence of test-criterion relationships evaluates how accurately the test scores predict criterion performance (AERA et al., 1999). Utilizing a developmental assessment center (DAC) program, this research was able to measure a participant's

RTD level and examine whether or not RTD predicted four criteria over a four-month period. The validity evidence collected in the predictive analyses establishes the extent to which RTD predicts an individual's developmental involvement. Two dimensions of developmental involvement examined in this study were feedback-engagement behavior and development activity.

Feedback-Engagement

Active feedback-seeking behavior regarding employee performance serves numerous useful purposes, such as increasing the likelihood of acceptance (Ashford, 1989) and more control over the amount and timing of the feedback (Ashford & Cummings, 1983; Levy, Albright, Cawley, & Williams, 1995), for both individuals and organizations. Several individual-difference variables have been examined as possible antecedents to feedback-seeking behavior (Tuckey, Brewer, & Williamson, 2003; VandeWalle, 2003). Two of those variables, goal-orientation and self-efficacy, have also been identified as possible correlates of RTD.

Research has found that individual differences in goal-orientation predict feedback-seeking behavior of employees (Tuckey et al., 2003, VandeWalle, 2003). VandeWalle and his colleagues (VandeWalle & Cummings, 1997) found that feedback-seeking behavior is positively related to learning goal-orientation and negatively related to performance goal-orientation. Learning-oriented individuals desire to master and learn new things and seek feedback to facilitate this process. Performance-oriented individuals wish to evade negative judgments and thus avoid

seeking feedback that could potentially provide harmful evaluations of their performance.

Ashford and Cummings (1983) identified that the desire to protect one's ego and self-esteem from the threat of negative feedback is one of the motives that influence feedback-seeking behaviors. Self-efficacy, a measure of one's confidence in his or her abilities, is also a correlate of RTD that is a key predictor of both intentions and behavior. Research has been straightforward on self-efficacy, finding that individuals with high self-efficacy already have great confidence in their abilities and are active feedback-seekers (Ashford, 1986). Low self-efficacy individuals would rather avoid further negative evaluations, and thus do not seek unnecessary feedback (Ashford, 1986). Because both goal orientation and self-efficacy are proposed correlates of RTD, it is expected that RTD will exhibit similar relationships as the two individual-difference variables. That is, similar to goal orientation and self-efficacy, it is theorized that RTD will have a positive relationship with active feedback-engagement behavior.

Assessment Center Exercise. During the design of the DAC, an assessment of developmental involvement was built into one of the two case study exercises. In the case study, a participant is asked to present a possible solution to a factitious problem he or she is facing in their management role. The assessor, also role-playing as the participant's supervisor, provides the manager with some constructive criticism and asks them to make the necessary changes and redo the presentation. After the completion of the exercise, the assessor is asked to rate the participant on his or her

engagement during the constructive feedback. An individual high in RTD should view the feedback as a developmental opportunity and engage in the process through clarification and acceptance of the advice. An individual holding a lesser level of RTD would be more likely to view the feedback as a personal attack and not be as accepting of the guidance provided by the assessor. Therefore, RTD should have a positive relationship with the assessor's rating of the participant's reaction to feedback during the case study.

Hypothesis 2a: RTD has a significant positive relationship with the assessors' rating of the participant's response to feedback in the case study assessments.

Feedback Session Engagement. Two feedback sessions, which take place during the DAC, provide an opportunity for participants to exhibit active involvement in their personal development. During the sessions, an assessor provides the participant with feedback regarding their performance in the previous exercises, asks for input from the participant, and creates an action plan to improve performance. While the format of the sessions were structured, they were also flexible enough to accommodate different levels of involvement from the participant. In other words, whether the participant becomes engaged in the process and asks numerous questions, or they simply sit back and listen, the assessor can adjust accordingly. The characteristics associated with an individual high on RTD suggest that they would take advantage of these feedback sessions, using them as an opportunity to increase their developmental involvement. Some examples of the engagement-type behaviors

observed might include the participant clarifying a constructive point, proposing their own suggestions, identifying additional developmental needs, or seeking-out more developmental activities and information. Upon providing the participant with his or her feedback and creating an action plan, the assessor is required to evaluate the participant's involvement during the session. The measure used asks the assessor to make judgments regarding the participant's engagement and approval of the feedback process. It is hypothesized that individuals higher on RTD will be more involved and accepting of the feedback than those low on RTD. Thus, RTD should have a positive relationship with both feedback session engagement evaluations.

Hypothesis 2b: RTD has a significant positive relationship with the feedback session engagement evaluation at the mid-day point of the assessment.

Hypothesis 2c: RTD has a significant positive relationship with the feedback session engagement evaluation at the end of the assessment day.

Development Activity

The benefit to both employees and organizations of participation in learning and development activities was described earlier in the introduction. In this study, one manner in which developmental involvement was measured was through progress made towards the completion of development goals. Similar to feedback seeking, many of the individual-difference variables that influence voluntary development behavior have also been identified as correlates of RTD. Factors such as self-efficacy,

goal-orientation, attitudes, and personality have all been linked to voluntary development participation.

According to some researchers (Maurer et al., 2003), individuals who have higher self-efficacy should feel more comfortable pursuing developmental opportunities. Empirical studies have found similar results linking self-efficacy to voluntary development activity (Maurer & Tarulli, 1994; Noe & Wilk, 1993) and training motivation (Colquitt et al., 2003). Maurer and his colleagues (Maurer et al., 2003) proposed that self-efficacy affects employee attitudes, which lead to intentions, and intentions to behavior.

Attitudes toward development define the degree to which individuals have favorable feelings toward or interest in development. It is suggested that an individual with more positive attitudes toward development will see more beneficial outcomes, and these attitudes should lead to greater intentions and development behavior (Maurer et al., 2003). Job attitudes have been linked to numerous work behaviors (Brief & Weiss, 2002; Judge, Bono, Thoresen, & Patton, 2001), and thus play an important role in predicting development participation. Because both self-efficacy and attitudes toward development are empirically associated with voluntary development activity, and are both proposed correlates of RTD, it can be expected that RTD will also predict voluntary development behavior.

Development Activity Evaluations. Upon completion of the assessment exercises, individuals participating in the DAC write down customized development plans that they should immediately take action on. The development plans have a list

of activities and goals that the participant is supposed to complete over the next several months. The list of activities will vary depending on the individuals' needs, but will facilitate the development process. Furthermore, prior to leaving the center the participant is encouraged to schedule follow-up phone interviews with the assessor. The purpose of the follow-up is to track goal accomplishments, revise and add new goals, and answer any questions the participant might have. While the assessors conducted follow-up interviews at one-, four-, nine-, and twelve-month intervals, only the four-month report was used for the purposes of this study.

After speaking to the participant at the four-month follow-up, the assessor completes a development activity evaluation that records the amount of progress that has been made towards the goals. RTD relates to the fulfillment of the goals in that individuals who are higher on RTD should make more progress towards their goals and have completed more developmental activities, as compared to those lower on RTD. Thus, RTD should have a positive relationship with development activity as recorded by the assessor.

Hypothesis 2d: RTD has a significant positive relationship with development activity evaluations four months post-assessment.

In sum, the model proposed in this study posits that RTD mediates the relationship between the various individual-difference variables and the behavioral manifestations of development involvement. The current study was designed to

investigate this relationship by examining relationships between the individual-difference variables and RTD, and RTD and development involvement.

CHAPTER II

METHOD

Participants

Data were collected from 200 managers of private and public sector companies that participated in a developmental assessment center program. As part of the assessment process, participants were asked to take a set of intake measures at the beginning of the on-site evaluation, partake in the developmental assessment center, and participate in a series of follow-up interviews. To be included in the analysis evaluating the validity evidence of the correlates of RTD, participants had to have completed the RTD measure, a personality inventory, and the goal-orientation measure.

To be included in the sample for the predictive validity analyses the participants had to have data collected for the five criteria as well as the RTD measure. First, participants had to complete the Approach to Development Experiences (ADE) questionnaire, developed to measure RTD, included in the intake battery. Then, they had to complete the full day assessment and receive development involvement evaluations from the assessor during one of the written case study exercises and both of the feedback sessions. Finally, the participants had to partake in the four-month follow-up interview in which the assessor completed a development

activity evaluation regarding the participant. Table 1 describes the variables measured to evaluate both the convergent and predictive validity evidence for this study.

Table 1
Hypotheses and Variables Measured

Hypothesis	Variable	Measure
Intake Battery (measures are self-reported)		
Construct of Interest		Approach to Development Experiences
	Readiness to Develop	
1a	Learning Orientation	Goal Orientation Scale
1b	Performance Orientation	Goal Orientation Scale
1c	Conscientiousness	AB5C
1d	Openness to Experience	AB5C
1e	Extraversion	AB5C
DAC Process (measures completed by assessors)		
2a	Assessment Center Exercise Ratings	RTD Exercise Dimension (BARS)
2b	Feedback Session Engagement 1	Feedback Session Evaluation
2c	Feedback Session Engagement 2	Feedback Session Evaluation
Follow-Up Interview (measures completed by assessors)		
2d	Development Progress 4-months	Development Activity Report

Overview of the Developmental Assessment Center Program

Data for the present research study were collected at a managerial developmental assessment center (DAC) located at large midwestern university. The DAC used in this research was designed through a collaboration between two large Midwestern universities and is part of a larger project directed at the empirical investigation of the assessment center method (Gibbons, Rupp, Baldwin, & Holub, 2005) The assessment program was developed to provide mid-level managers the

opportunity to have their abilities assessed and receive developmental feedback. The services conducted at the center were provided free of charge to organizations that agreed to voluntarily exchange personnel information and allow the data to be used for research purposes. Because the center was external to the participating organizations, the developmental feedback given to individuals was kept confidential and no administrative decisions were made based on the assessment data.

Intake Battery. Participants in the DAC program completed a battery of tests during an intake procedure prior to the assessment process. The intake battery measured several individual-difference variables including cognitive ability, personality, vocational interest, goal orientation, sexual harassment experiences, and RTD. However, the analyses conducted for the current study only examined a few of these variables. The measures were completed on computers by the participants and took approximately an hour. The scores from the intake were used for research purposes only, and neither the participants nor the assessors were made aware of the intake scores during the DAC program.

DAC Process. After the intake battery, participants began the assessment portion of the DAC program. Four groups, with six participants in each, were run through the DAC program each month. Each participant participated in six exercises throughout the day-long program. Each day was broken up into a half-day block of three exercises. Each block contained parallel exercises and dimensions for assessment. At the start of a three-exercise block, the participant would assume the

role of a manager in a factitious organization. Each exercise within the block would present different scenarios and ask the participant to perform a diverse set of managerial behaviors. The center was designed to provide participants developmental feedback on six primary dimensions consider critical for managerial performance. Each of the six dimensions was assessed twice per block, with the participant receiving developmental feedback after each of the two blocks.

A multi-step process was used to select the most critical and applicable dimensions to include in the DAC (Rupp, Gibbons, Runnels, Anderson, & Thornton, 2003). Initially, a team of researchers identified a set of sixteen dimensions that were recognized through research as being important for managerial assessment purposes. Then, a survey was utilized to solicit the opinions of current managers on the importance and developability of those sixteen dimensions. Finally, using the data from the survey, and suggestions from researchers familiar with the assessment center methodology, six dimensions were selected. These six dimensions were selected based on a combination of their importance for managerial performance and the ease at which they can be developed (Rupp et al., 2003). The six dimensions include conflict management, information seeking, leadership, oral communication, planning and organizing, and problem solving.

The exercises used in the DAC were developed by the research team and included a leaderless group discussion, written case study, and an oral presentation. Each of the three exercises assessed four of the six primary dimensions in each block. At the beginning of each block the participant was given some background information and support materials that would be used throughout the three exercises

in that block. They also received more specific information at the beginning of each exercise. The leaderless group discussion presented the participants with information regarding a problem facing their artificial organization. The participants then had to work together to understand the problem, generate possible solutions, and select an agreed-upon final resolution to the problem. In both the oral presentation and the written case study, the participants were required to work alone on tasks or issues commonly faced in organizations. The participant was given materials that addressed an issue within the organization. They were asked to use those materials to compose an appropriate plan of action to render the problem, and then present their plan to a superior.

Assessors for the DAC were from graduate programs in human resource management or industrial/organizational psychology. Assessors were trained in a four-week certification process in which several criteria had to be completed. The criteria for certification included a day and a half of traditional classroom style learning, experiencing the DAC through participation, observation from experienced assessors, paper-and-pencil exams, and supervised assessment and feedback. Periodic refresher training was given throughout the year to all active assessors.

Up to six assessors were present during the day when the DAC was run, depending on the number of participants that day. Each assessor observed one participant in each of the exercises. Participants were also assigned a primary assessor who was responsible for providing personal feedback to the participant following each block of exercises. During the exercises, the assessors were responsible for taking behavioral notes related to the dimensions being measured in the observed

exercise. Immediately following the exercise, assessors used the behavioral observations to rate the participants on the relevant dimensions being assessed.

At the end of each exercise block, the assessors and DAC program director held an integration session to combine their ratings of the participants. During this session, the three assessors who observed the participant discussed, integrated, and prepared the participant's feedback. The primary assessor would go over the integrated feedback and ask the other assessors for clarification on any misunderstood information. Once all three assessors were in agreement with the feedback to be delivered, the primary assessor would be responsible for assembling a more comprehensive final report.

After the primary assessor finalized the feedback, he or she privately met with the participant to go over the report. The participant received feedback, including behavior examples from the exercises, on the six primary dimensions that were assessed in the previous three exercises. Throughout the feedback session, the participant was encouraged to ask for clarification, discuss the feedback, and share their perceptions of the evaluation and their performance. After discussing the feedback, the assessor and the participant collaborated to identify the important development needs and create an action plan to address those needs. While the action plan created at the mid-day session was directed at development during the second set of exercises, the feedback session at the end of the day concentrated on development to enhance job performance once the individual returned to the job.

Follow-Up Interviews. During the last feedback session, assessors worked closely with the participant to create an actionable development plan that they could immediately take back to the job and initiate on their own. Participants were then responsible for their own progress and results concerning the development plan. Before leaving the center, a series of follow-up interviews were scheduled with the participant to evaluate progress made and re-examine the development goals originally set during the final feedback session. The follow-up interviews were scheduled for one, four, nine and twelve month's post-assessment. The assessors collected criterion data relating to RTD only at the four-month follow-up.

Measures

Readiness to Develop. The Approach to Development Experiences (ADE) questionnaire (Appendix A) is designed to assess an individual's readiness to develop (RTD), and includes such items as "I take advantage of opportunities to better myself", "I regularly evaluate my development goals", and "I actively search for ways to advance myself". The 19-item measure asks respondents to reply on a five-point scoring system with anchors ranging from a "1" (not like me) to a "5" (a great deal like me). Higher scores on the measure indicate that the individual holds a higher degree of readiness to develop. The ADE questionnaire demonstrated a coefficient alpha of .87 in a previous study (Walter, 2004) and .89 in this sample. Participants completed the measure during the intake battery on the day of assessment.

Goal Orientation. Individual's performance and learning goal orientation were assessed using the sixteen-item scale (Appendix C) developed by Button et al.

(1996). Eight items, such as “The things I enjoy the most are the things I do the best” and “I like to work on task I have done well on in the past”, measure performance-orientation, while another eight items, including “I do my best when I’m working on a fairly difficult task” and “I try hard to improve on my past performance”, measure learning-orientation. Responses were made using a 7-point scale with anchors ranging from “Strongly Disagree” (1) to “Strongly Agree” (7). The performance and learning goal orientation scales were assessed during the intake battery, and exhibited alpha levels of .79 and .82 respectively.

Personality Descriptors (Openness to Experience, Conscientiousness, and Extraversion). The Abridged Big-5 Circumplex (AB5C) (Hofstee, De Raad, & Goldberg, 1992) represents trait adjectives based on their loadings on the Big Five factors (Appendix B). The AB5C describes ten two-dimensional circumplexes by opposing each of the Big Five factors against one another. It presents facets in terms of their primary and secondary factor loadings on the Big Five dimensions. This research used three scales, comprised of ten to thirteen items in each, that represent the Five Factor Model’s openness to experience, conscientiousness, and extraversion. Participants were instructed to indicate how well a series of trait-related statements described them using a 5-point scale ranging from “very inaccurate” (1) to “very accurate” (5). Large internal consistency-reliabilities were reported for extraversion ($\alpha = .89$), openness to experience ($\alpha = .83$), and conscientiousness ($\alpha = .76$).

Case Study Assessment. A measure of RTD was assessed during one of the two case study exercises, along with the designated primary dimensions for the exercise, by the assessor (Appendix E). The assessor evaluated the participant on

three subdimensions of RTD and an overall RTD rating using a seven-point scale with anchors ranging from “needs improvement” (1) to “highly proficient” (7). The three subdimensions include feedback seeking, acceptance of feedback, and interest in development. Only the overall RTD score was used as a criterion variable in this study.

Feedback Session Engagement. After the mid-day and end-of-day feedback sessions, assessors are asked to evaluate the participants RTD using an eight-item questionnaire (Appendix D). The questionnaire asks a series of questions regarding how the participant reacted during the previous feedback session. The items, such as “How engaged in the discussion was the participant throughout the feedback session” and “What was the participant’s first reaction to your initial feedback”, are scored on five-point scales with lower scores indicating a lower degree of RTD.

Development Activity Report. The RTD follow-up questionnaire (Appendix F) was designed to assess the participant’s engagement in developmental activity after the DAC and the completion of their development plan. The assessor completed the twelve-item questionnaire after conducting a follow-up interview with the participant. The questionnaire includes items such as “To what extent has the participant discussed his/her development goals and ways to improve with others (e.g., supervisor, mentor, HR rep) in the time since the program”. The items were scored on a five-point scale ranging from “not at all” (1) to “a lot” (5).

CHAPTER III

RESULTS

The first step in the analysis was to determine if the sample size used in this study could produce enough statistical power to accurately conduct the hypothesis testing. A power analysis determines the probability that the null hypotheses will be rejected when they are in fact wrong (Murphy & Myors, 1998). The required sample size to reach an acceptable level of power was calculated using G*Power (Erdfelder, Faul, & Buchner, 1996), a statistical software program designed to conduct power analyses. In order for the software program to calculate sample size requirements, other input variables must first be determined. First, because the effect sizes for the proposed relationships are unknown, they had to be estimated. Utilizing theory and empirical support found in previous research, it was estimated that the relationships found in this study would generate a medium-sized ($f^2 = .17$) effect according to Cohen's (1988) effect size conventions.

The second input variable that must be determined is the desired level of power to be reached. Murphy and Myors (1998) state that it is necessary to have power levels above .50 to trust any found results. However, the authors go on to recommend that to assure the utmost confidence in the results, analyses should maintain statistical power levels .80 or higher (Murphy & Myors, 1998). Therefore,

since the majority of power analyses specify .80 as the desired level, and it is the widely accepted value in the literature, .80 will also serve as the preferred level of power for this study. Thus, given the alpha level ($p < .05$), number of predictors ($K = 2$), effect size ($f^2 = .17$), and desired power (.80) the software program determined that a sample size of 60 was required. The samples used in this study ranged from 70 to 167. Therefore, all of the analyses conducted for the purposes of this study will yield acceptable levels of power according to the standards recommended in the literature (Murphy & Myers, 1998).

The means, standard deviations, and correlation coefficients of the ten variables measured in this study are presented in Table 2. Due to the measures being assessed at different points in time, and a technical malfunction with one of the databases, the variables retained different sample sizes. The analyses using conscientiousness, extraversion, openness to experience, readiness to develop, the assessment center exercise ratings, and the two feedback session engagement evaluations had a sample size of 167. A technical problem with the goal-orientation database reduced the sample size for the learning- and performance-goal orientation measures to 87. Furthermore, because the follow-up development activity evaluations did not occur until four months post-assessment, not all of the participants responded, decreasing the sample size for this measure to 70. The main diagonal of Table 2 provides the internal reliability coefficients of the measures. The results suggest strong internal reliability for all of the measures and ranged from .74 for conscientiousness to .94 for the end-of-day feedback session engagement evaluation.

Table 2
Summary Statistics and Correlations Among the Variables Measured

Measure	M	SD	1	2	3	4	5	6	7	8	9	10
1. Learning-Goal Orientation	5.91	.58	(.82)									
2. Performance-Goal Orientation	4.89	.85	.155	(.79)								
3. Conscientiousness	3.99	.46	.302**	.172	(.74)							
4. Openness to Experience	3.81	.56	.355**	.057	.165*	(.82)						
5. Extraversion	3.09	.82	.222*	.054	-.026	.261**	(.89)					
6. Assessment Center Exercise Ratings	4.47	1.17	-.010	.073	.063	.050	.025	(.89)				
7. Feedback Engagement Evaluation 1	3.47	.77	-.002	-.038	-.116	.162*	.104	.281**	(.93)			
8. Feedback Engagement Evaluation 2	3.75	.78	.107	-.146	-.125	.175*	.099	.284**	.787**	(.94)		
9. Follow-up Development Activity Evaluation	3.07	.71	.262	.111	.145	-.072	.071	.340**	.443**	.483**	(.89)	
10. Readiness to Develop	3.72	.53	.169	.003	-.056	.139*	.201**	.109	.034	.123	.250*	(.89)

Note. $N = 70$ for correlations involving the follow-up development activity evaluation; $N = 87$ for correlations involving learning-goal and performance-goal orientation; $N = 167$ for the other correlations including conscientiousness, openness to experience, extraversion, assessment center exercise ratings, feedback session engagement evaluation 1 & 2, and readiness to develop.

* $p < .05$; ** $p < .01$; () indicates the alpha coefficient for that measure

It is worth noting that the RTD scale had a strong coefficient alpha ($\alpha = .89$), indicating an acceptable internal structure. The internal structure of a measure is an indication of the relationship among test items and indicates the degree to which those items match the construct being measured and its intended purpose (AERA et al., 1999). Establishing an acceptable internal structure is one step in accumulating evidence to support RTD as a valid construct.

Correlates of Readiness to Develop

Demonstrating the relationships between test scores and other related variables intended to measure similar constructs provides another step in creating a validity argument for RTD. The first set of hypotheses examined in this study investigates the nomological network of RTD, and provides convergent evidence for the construct. Hypotheses 1a and 1b predicted that a learning-goal orientation would have a significant positive relationship with RTD and a performance-goal orientation would have a significant negative relationship with RTD respectively. The data indicate that neither of these hypotheses was supported in this study. Both learning-goal ($r = .169, p < .061$) and performance-goal ($r = .003, p < .490$) orientation had nonsignificant relationships with readiness to develop.

Hypotheses 1c-1e predicted that specific personality dimensions from the Five Factor Model would be related to RTD. The results of the analyses illustrate that RTD has a significant relationship with openness to experience ($r = .139, p < .037$) and extraversion ($r = .201, p < .005$), but not conscientiousness ($r = -.056, p < .240$).

Thus, support was found for two of the hypotheses (H_{1d} and H_{1e}), but not the remaining one (H_{1c}).

Test-Criterion Relationships

This study examined the test-criterion relationships of RTD using four criteria that were designed to assess an individual's degree of developmental involvement in various activities. Past research has related several of the proposed correlates of RTD to such development behaviors as feedback engagement and development participation. Thus, it was predicted in hypotheses 2a-2d that RTD would be significantly related to four criteria that included an assessment center exercise rating, two feedback session engagement evaluations, and a follow-up development activity evaluation. The data presented in Table 2 show that RTD has a significant relationship with the follow-up development activity evaluation ($r = .250, p < .040$). However, this study was not able to find a significant relationship between RTD and either of the two feedback session engagement evaluations or the assessment exercise ratings. Thus, this study was able to only support hypothesis 2d.

Mediation Analysis

The general hypothesis of this study, that RTD mediates the relationship between various individual difference variables and developmental involvement, was tested using procedures recommended by Baron and Kenny (1986). Barron and Kenny (1986) suggested that four conditions be met in order for a mediating variable to exist. A variable functions as a mediator when (1) variations in the independent

variable significantly account for variations in the dependent variable, (2) variations in the independent variable significantly account for variations in the proposed mediator, (3) variations in the mediator significantly account for variations in the dependent variable, and (4) the previously significant relationship between the independent variable and the dependent variable decreases (partial mediation) or becomes insignificant (full mediation) while controlling for the mediator (Barron and Kenny, 1986).

The results presented in Table 2 show that the proposed mediating variable, RTD, only has a significant relationship with one dependent variable, the follow-up development activity evaluations. The results also show that none of the proposed independent variables have a significant relationship with the follow-up development activity evaluations. Therefore, the results of this study do not meet the four criteria outlined above, and RTD cannot be examined as a possible mediating variable in the relationships between the predictors and criteria.

Supplemental Results

The results of this study also illustrate several other significant relationships, which were not previously hypothesized, that are worth mentioning. Learning-goal orientation had a significant relationship with conscientiousness ($r = .302, p < .003$), openness to experience ($r = .355, p < .000$), and extraversion ($r = .222, p < .021$). Performance-goal orientation did not have a significant relationship with any of the measured variables in the study. Openness to experience was the only individual difference variable that was found to have a significant relationship with any of the

developmental outcome variables. Openness to experience was found to have a significant relationship with both the mid-day and end-of-day feedback session engagement evaluations ($r = .162, p < .030$; $r = .175, p < .025$). The results also showed that openness to experience and conscientiousness had a significant relationship ($r = .165, p < .000$).

Another set of significant associations found in this study are those amongst the four dependent variables. The assessment center exercise ratings, both the mid-day and end-of-day feedback session engagement evaluations, and the follow-up development activity evaluation were all significantly related to one another. For example, the follow-up development activity evaluation had a significant relationship with the assessment center exercise ratings ($r = .340, p < .005$), the mid-day feedback session engagement evaluations ($r = .443, p < .000$), and the end-of-day feedback session engagement evaluations ($r = .483, p < .000$). The largest correlation amongst all of the variables measured in the study was found between the mid-day feedback session engagement evaluations and the end-of-day feedback session engagement evaluations ($r = .787, p < .000$).

CHAPTER IV

DISCUSSION

Hall and Mirvis (1995) suggested that personal responsibility for development has become a critical component of career success. Organizations do not have the manpower or financial resources to monitor every employee involved in a training program, therefore many organizations have to rely on the employee to take responsibility for their own development. When organizations adopt this type of development strategy, the individual is held responsible for their own learning and development. Therefore, it is increasingly important to understand the decision making process that employees apply to make developmental choices.

This study was designed to examine the influences on and criteria of RTD, a construct intended to capture an individual's learning and development orientation, in an effort to collect validity evidence in support of the construct, and place RTD in a nomological network with related variables. London and Mone (1999) suggested that as job requirements continue to rapidly change, learning and responsiveness becomes more valuable than performance. Thus, this study proposed several individual difference variables that effect an employee's orientation towards learning and development captured in the RTD construct. Of the five individual difference

variables proposed, extraversion and openness to experience were found to have significant relationships with RTD.

The results of this study support previous findings that individual difference variables, such as openness to experience and extraversion, influence an individual's development participation (Barrick & Mount; 1991, Colquitt et al., 2000; LePine, et al., 2000; London & Smither, 1999a; Maurer, 2002). By examining the facets of the variables, such as extraversion's talkativeness and sociability dimensions, the relationship between the individual difference variables and RTD can be explained. An extraverted employee is more likely than an introverted employee to seek advice from others, discuss developmental goals, engage in feedback, and actively participate during role-plays or in training class because the extravert is more sociable, assertive, and ambitious (McCrae, 1993).

Individuals high in openness to experience tend to be creative, receptive to change, enjoy intellectual types of problems, more willing to try new things, and more willing to engage in self-monitoring and assessment required for development (McCrae, 1993; McCrae & Costa, 1987). Therefore, openness to experience influences readiness levels by motivating an employee's intellectual curiosity and need for understanding and change. Employees who are open-minded and independently curious are more likely to partake in various development activities, participate in novel experiences, and experiment with different methods of learning strategies than those who are closed-minded. These findings are similar to Barrick and Mount's (1991) meta-analysis in which they suggested that open individuals would be more motivated to learn and hold more positive attitudes regarding

development. Together, these findings suggest that as an individual's level of extraversion and openness to experience increase, so does their level of readiness.

Perhaps the most surprising finding is the inability of this study to replicate results that have found a relationship between goal-orientation and developmental involvement. Previous research found that learning-goal orientation had positive effects on development participation (Brett & Vandewalle, 1999; Button et al., 1996; Colquitt & Simmering, 1998; Vandewalle & Cummings, 1997), while performance-goal orientation had more negative influences on development behaviors (Brett & Vandewalle, 1999; Colquitt & Simmering, 1998; Phillips & Gully, 1997). It was expected that similar results would be found in this research. However, it is possible that the technical mishap, causing the loss of half of the sample for the goal-orientation measure, could be a cause for the lack of a significant relationship. Future research should continue to test this relationship, especially given the strong results from previous work.

The second set of hypotheses in this study proposed that RTD was predictive of developmental involvement. Data was collected on four criteria to represent developmental involvement including assessment center exercise ratings, two feedback session engagement evaluations, and a follow-up development activity evaluation. RTD was able to predict developmental activity measured during the follow-up evaluations, but had no relationship with the feedback session evaluations or the assessment exercise ratings. Unlike most research on development participation which uses concurrent designs by asking respondents to rate development activity based on past behaviors (Birdi et al., 1997; Maurer & Tarulli, 1994; Noe & Wilk,

1993), this study used a predictive design and asked participants to record activity over a 4-month period. Thus, the results provide empirical support that RTD is able to predict development behaviors 4-months post-assessment. These findings are the first step in validating an individual difference construct specifically designed to predict development behavior more distal in nature.

It should be mentioned that the context in which the exercise ratings and feedback sessions took place could have restricted the participants' behaviors. In both situations, participant's actions were restricted by the heavily structured nature of the circumstances. For example, during the feedback sessions the assessors were required to read from a standardized script to deliver feedback to participants. There was also a limited amount of time in which the assessor and participant had to interact. Thus, the strict program of events could have led the participants to behave in a similar manner by limiting the amount of feedback engagement behavior that could be exhibited. While the results of this research illustrate that the relationships among the four dependent variables were all significant, there was enough unexplained variance remaining for the criteria to have distinct relationships with RTD. Given this situation, RTD would not be expected have a significant predictive relationship with the assessment center exercise ratings or the feedback session engagement evaluations. Therefore, future research should examine the relationship between RTD and development behavior in contexts that are less structured in which participant's behaviors are less restricted and are free to act on their behavioral intentions.

Limitations

A limitation of this study surrounds the accuracy of the dependent variable. Specifically, there are two accuracy issues that could exist. First, is the definition of developmental involvement. The dependent variable, as measured from the four evaluations, is very broadly defined and each dimension requires a subjective judgment by the assessor. For example, when the participants are asked to report their activity during the follow-up interviews, it is possible that various participants report different types of activities depending on how they define developmental behavior. Future research on RTD should utilize a more standardized approach to defining and recording developmental activity. An objective measure of the dependent variables would likely increase the relationship between them and RTD.

A further accuracy limitation was the reliance on self-report variables measured from the same source. Because many of the variables were taken from a single respondent, some associations may be due to the response style of the individual, or same-source bias. For example, there could be contamination between the self-report measure of RTD and the self-reporting of developmental activity to the assessors. The participants in this study completed a measure of RTD prior to the developmental assessment center and then reported their development activity during a follow-up interview. This method allows the participants to define and select for themselves what behaviors are considered developmental. A participant could inflate his or her developmental behavior to match his or her perception of RTD. That being said, the RTD measure was completed along with several other measures during an intake battery, and the development behaviors are not reported until three to four

months later. Thus, effect size inflation due to same source bias should not be a concern when interpreting the results of this study.

A further limitation of this study was that all of the developmental feedback and planning was focused around a handful of dimensions that were assessed during the DAC. While the dimensions assessed were determined to be important for managerial success across various job types and industries, it's possible that at the individual level some participants didn't feel the skill dimensions were relevant or transferable. The focus on these few dimensions also detracted from a broader, customized approach to development. Different relationships could exist if the development activity was individualized and not restrained by focusing only on the skill dimensions assessed during the DAC.

Finally, this study was conducted under very unique circumstances that might prevent generalizing the findings to other situations. The assessment center was conducted in a university setting, an off-site location for all participants, and the assessors were trained graduate students, not HR personnel. While the ultimate decision to actively pursue development goals is the individual's, the formal nature of this particular situation should be considered when interpreting the results. The development program from start to finish was very structured with clearly defined roles and goals. It should be recognized that different results could be found if the program was conducted in the more commonly encountered on-site center run by an internal learning and development department.

Suggestions for Future Research

It is recognized that these results are only a first step in understanding the relationship between the individual difference variables and RTD, and RTD and developmental involvement. As with any new construct measure, additional research is needed to further support the validity efforts. Several suggestions can be made to insure the accuracy of future research on RTD. First, future research should attempt to incorporate all of the variables that are proposed to have a direct influence on RTD that were not included in this study. Such variables might include self-efficacy, implicit person theories, and affect.

Another recommendation for future research is to measure different development outcome variables. It is possible that the validity evidence found in this research may be a function of the dependent variables chosen. Therefore, future research should select a diverse set of dependent measures to examine which exhibit the strongest relationships with RTD. Research has also suggested that aspects of the work environment influence employees' participation in developmental activity (London & Mone, 1999; Maurer, 2000; Noe & Colquitt, 2002, Noe & Wilk, 1993). Future research should include contextual variables, such as social support and situational constraints, to determine their role in the RTD-development involvement relationship.

Finally, future research on RTD needs to examine if the relationship between RTD and developmental involvement is contingent upon organizational policy regarding development. This study collected no information about why an individual chose to participate in the DAC or the authority the participants' organization had in

the process. It is very reasonable to assume that individuals participated for different reasons, and RTD's relationship with other variables could vary depending on those reasons. For example, in an organization that embraces more of a hands-off approach, RTD should have a more significant influence on development participation. On the other hand, in an organization where development is more controlled and procedures about development participation are well established, RTD would likely have a less significant influence. Therefore, future research should attempt to collect information about the organization's strategy and policy towards development, and test for differences in RTD's relationships in the dissimilar environments.

Conclusions

Whereas most constructs found in the literature that are related to developmental involvement are not clearly or completely defined (Maurer, 2000), the research focusing on RTD attempts to communicate the psychological content and processes that influence an individual's development decisions. The inconsistent definitions and lack of measures to assess a learning and development orientation have hindered theoretical and practical advancements. This research had two purposes: (1) to explore the theoretical groundwork of a learning and development orientation construct and (2) to conduct a construct validation of the development orientation measure.

Despite its limitations and the fact that not all of the hypotheses were supported, this study makes both theoretical and practical contributions. Theoretically, this research provides one of the few empirical tests of the factors that

influence developmental involvement, and supports the assertion that individual difference variables influence those decisions. Specifically, it provides an investigation of the factors that directly influence an individual's readiness to develop, an area identified as important to understanding development involvement. Attaining an initial understanding of some of the variables that have been proposed to influence an employee's development orientation will guide future researchers and theory related to similar concepts.

The practical implications of this research are twofold. First, the results suggest that employees who possess a higher level of RTD are more likely to participate in developmental activity than those low in RTD. The benefits for organizations to employ a workforce with a high level of readiness to develop are evident in previous research. Various outcome variables that are related to participation in learning activities including improved job performance, maintaining competence, and advancement (London & Mone, 1999). Organizations can utilize the RTD measure to assess development orientation throughout an entire organization, a specific line of business, or an individual employee. This information will provide the organization with the developmental characteristics of its employees, and if those employees are ready to initiate and manage the development process for themselves. Furthermore, the results suggest that if the organization is interested in increasing the amount of self-directed learning, they should look to enhance the strength of RTD in the organization.

The second practical contribution of this research suggests ways in which an organization, learning and development specialist, or an employee can increase RTD

levels. The results of this study suggest that organizational interventions aimed at improving the facets of extraversion and openness to experience should increase RTD and therefore developmental involvement. It should also be noted that although emotional stability was not hypothesized to have a relationship with RTD, a supplementary analysis did support a significant relationship ($r = .181, p < .011$) between the two variables. Thus, emotional stability appears to be another individual difference variable that influences an individual's learning and development orientation.

One of the reasons that RTD research progressed was due to the request in the literature for more attention to be focused on individual-difference variables that influence development participation decisions. This study presented a unique opportunity to investigate such factors in a developmental environment. The DAC was distinctive in that it provided a safe environment for individuals to participate in a developmental assessment program and work on a development plan anonymously. The organization did not receive any information about the participants' assessment scores or progress on development goals. Therefore, it was left up to the participant to decide how much time and effort they would invest in the program. This resulted in an excellent opportunity to examine RTD in a situation in which the development decisions were in the hands of the individual. The findings, while significant, illustrate that an individual-difference construct such as RTD only explains 5% of the variance associated with developmental involvement. The theoretical groundwork presented earlier suggested that other variables not measured in this study, some of which are organizational factors, will also influence developmental involvement.

Therefore, another way of interpreting these results suggests that although organizations are interested in shifting development responsibly to the individual, it is likely they would have higher developmental involvement by retaining partial control of employee development.

One of the strengths of this study was the complexity of the research design. The development and implementation of this study required the researchers to be involved in a diverse set of activities that included theorizing and drafting the RTD construct along with a model of developmental involvement; developing a measure of RTD and pilot testing the tool; researching, designing, and implementing a developmental assessment center for mid-level managers; and the creation of development plans and follow-up interviews. The reliability and validity of this field study was maximized by designing the developmental assess center program with the RTD construct in mind, and through the incorporation of professional mid-level managers from various industries. Overall, the results of this study were an initial test of a subset of the proposed variables in RTD's nomological network. The findings suggest that the personality characteristics of extraversion and openness to experience influence an individual's readiness to develop, and that readiness to develop is predictive of future development activity.

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APPENDIX A

Approach to Developmental Experiences Questionnaire

Name: _____	Date: _____
Approach to Developmental Experiences	
Directions:	
Please circle the number at the right that best corresponds with your answer to the statement. The scale provided ranges from a 1 "less like me", to a 5 "a great deal like me".	
	To what extent does the statement describe me:
	Not like me A lot like me A great deal like me
1 I seek feedback about my performance in training programs.	1 2 3 4 5
2 I participate in training programs even if they are not required.	1 2 3 4 5
3 I get upset when someone suggests how I could do things differently.	1 2 3 4 5
4 I take advantages of opportunities to better myself.	1 2 3 4 5
5 I look forward to new challenges.	1 2 3 4 5
6 I ask others to suggest ways I can improve myself.	1 2 3 4 5
7 I seldom try new ways to do things.	1 2 3 4 5
8 I am aware of my development needs.	1 2 3 4 5
9 I set highly competitive goals for myself.	1 2 3 4 5
10 I don't go to presentations or programs that help me improve.	1 2 3 4 5
11 I search for new ways to develop myself.	1 2 3 4 5
12 I regularly evaluate my development goals.	1 2 3 4 5
13 I read the latest materials in my field.	1 2 3 4 5
14 I actively search for ways to advance myself.	1 2 3 4 5
15 I take advantage of opportunities to improve my job related skills.	1 2 3 4 5
16 I get angered when someone comments on my job performance.	1 2 3 4 5
17 I am interested in improving my job related skills.	1 2 3 4 5
18 I try to see how others are doing their work, so I can learn from them.	1 2 3 4 5
19 I seldom think about ways to improve.	1 2 3 4 5

APPENDIX B

AB5C Personality Inventory

Please indicate how well the following statements capture how **you act**, and behave and see yourself in general. Please be as accurate as possible in your ratings. Please base your ratings on how you see yourself at the present time, not as you wish to be seen in the future.

Please circle one of the numbers listed before each trait indicating whether that trait describes you using the following rating scale:

	Very Inaccurate 1	Moderately Inaccurate 2	Neither 3	Moderately Accurate 4	Very Accurate 5	
	1	2	3	4	5	Think ahead.
	1	2	3	4	5	Am not bothered by messy people.
	1	2	3	4	5	Try to understand myself.
	1	2	3	4	5	Often make last-minute plans.
	1	2	3	4	5	Dislike learning.
	1	2	3	4	5	Do things in a logical order.
	1	2	3	4	5	Am not easily distracted.
	1	2	3	4	5	Like to be of service to others.
	1	2	3	4	5	Do things by the book.
	1	2	3	4	5	Use difficult words.
	1	2	3	4	5	Seldom get mad.
	1	2	3	4	5	Follow through on my commitments.
	1	2	3	4	5	Like order.
	1	2	3	4	5	Follow a schedule.
	1	2	3	4	5	Enjoy thinking about things.
	1	2	3	4	5	Leave a mess in my room.
	1	2	3	4	5	Change my mood a lot.
	1	2	3	4	5	Am easily talked into doing silly things.
	1	2	3	4	5	Finish what I start.
	1	2	3	4	5	Am not interested in other people's problems.

APPENDIX B (continued)

	Very Inaccurate 1		Moderately Inaccurate 2		Neither 3		Moderately Accurate 4		Very Accurate 5	
1	2	3	4	5						Check over my work.
1	2	3	4	5						Like to act on a whim.
1	2	3	4	5						Laugh at the slightest provocation.
1	2	3	4	5						Believe in a logical answer for everything.
1	2	3	4	5						Am not bothered by disorder.
1	2	3	4	5						Leave my work undone.
1	2	3	4	5						Take others' interests into account.
1	2	3	4	5						Have a rich vocabulary.
1	2	3	4	5						Find it difficult to get down to work.
1	2	3	4	5						Believe in an eye for an eye.
1	2	3	4	5						Leave my belongings around.
1	2	3	4	5						Set high standards for myself and others.
1	2	3	4	5						Am not as strict as I should be.
1	2	3	4	5						Do things at the last minute.
1	2	3	4	5						Purchase only practical things.
1	2	3	4	5						Postpone decisions.
1	2	3	4	5						Am not easily frustrated.
1	2	3	4	5						Don't see things through.
1	2	3	4	5						Don't think laws apply to me.
1	2	3	4	5						Respect others' feelings.
1	2	3	4	5						Take good care of my belongings.
1	2	3	4	5						Never spend more than I can afford.
1	2	3	4	5						Let my attention wander off.
1	2	3	4	5						Demand quality.
1	2	3	4	5						Am careful to avoid making mistakes.
1	2	3	4	5						Keep in the background.

APPENDIX B (continued)

Very Inaccurate		Moderately Inaccurate		Neither	Moderately Accurate		Very Accurate
1	2	3	4	5	4	3	2
1	2	3	4	5			Don't like to draw attention to myself.
1	2	3	4	5			Appreciate good manners.
1	2	3	4	5			Put off unpleasant tasks.
1	2	3	4	5			Accomplish my work on time.
1	2	3	4	5			Am often late to work.
1	2	3	4	5			Behave properly.
1	2	3	4	5			Have an eye for detail.
1	2	3	4	5			See that rules are observed.
1	2	3	4	5			Do crazy things.
1	2	3	4	5			Disregard rules.
1	2	3	4	5			Bottle up my feelings.
1	2	3	4	5			Come straight to the point.
1	2	3	4	5			Carry out my plans.
1	2	3	4	5			Keep a sharp eye on others' work.
1	2	3	4	5			Never splurge.
1	2	3	4	5			Frequently forget to do things.
1	2	3	4	5			Handle tasks smoothly.
1	2	3	4	5			Pay no attention to my appearance.
1	2	3	4	5			Jump into things without thinking.
1	2	3	4	5			Keep my cool.
1	2	3	4	5			Get stressed out easily.
1	2	3	4	5			Need a push to get started.
1	2	3	4	5			Am easily distracted.
1	2	3	4	5			Complete tasks successfully.
1	2	3	4	5			Get upset easily.

APPENDIX B (continued)

Very Inaccurate		Moderately Inaccurate		Neither	Moderately Accurate		Very Accurate
1	2	3	4	5	4	3	2
1	2	3	4	5	Seldom notice details.		
1	2	3	4	5	Get to work at once.		
1	2	3	4	5	Reason logically.		
1	2	3	4	5	Get a head start on others.		
1	2	3	4	5	Am always prepared.		
1	2	3	4	5	Keep my thoughts to myself.		
1	2	3	4	5	Talk to a lot of different people at parties.		
1	2	3	4	5	Mess things up.		
1	2	3	4	5	Like to laugh out loud.		
1	2	3	4	5	Am exacting in my work.		
1	2	3	4	5	Have difficulty starting tasks.		
1	2	3	4	5	Want things to proceed according to plan.		
1	2	3	4	5	Let people pull my leg.		
1	2	3	4	5	Take no time for others.		
1	2	3	4	5	Am easily disturbed.		
1	2	3	4	5	Get chores done right away.		
1	2	3	4	5	Appreciate the viewpoints of others.		
1	2	3	4	5	Do things in a half-way manner.		
1	2	3	4	5	Sympathize with others' feelings.		
1	2	3	4	5	Stick to the rules.		
1	2	3	4	5	Return borrowed items.		
1	2	3	4	5	Want everything to be "just right."		
1	2	3	4	5	Believe that criminals should receive help rather than punishment.		
1	2	3	4	5	Don't talk a lot.		
1	2	3	4	5	Shirk my duties.		

APPENDIX B (continued)

Very Inaccurate 1		Moderately Inaccurate 2		Neither 3		Moderately Accurate 4		Very Accurate 5	
1	2	3	4	5					Expect dedicated work from others.
1	2	3	4	5					Pay attention to details.
1	2	3	4	5					Keep my checkbook balanced.
1	2	3	4	5					Follow through with my plans.
1	2	3	4	5					Am not easily bothered by things.
1	2	3	4	5					Am quiet around strangers.
1	2	3	4	5					Skip difficult words while reading.
1	2	3	4	5					Am the life of the party.
1	2	3	4	5					Sympathize with the homeless.
1	2	3	4	5					Make a mess of things.
1	2	3	4	5					Have no sympathy for criminals.
1	2	3	4	5					Feel little concern for others.
1	2	3	4	5					Often forget to put things back in their proper
1	2	3	4	5					Neglect my duties.
1	2	3	4	5					Dislike routine.
1	2	3	4	5					Show a mastery of language.
1	2	3	4	5					Do things according to a plan.
1	2	3	4	5					Tend to dislike impulsive people.
1	2	3	4	5					Don't pay attention.
1	2	3	4	5					Seldom take offense.
1	2	3	4	5					Do the opposite of what is asked.
1	2	3	4	5					Dislike imperfect work.
1	2	3	4	5					Can't be bothered with other's needs.
1	2	3	4	5					Am indifferent to the feelings of others.
1	2	3	4	5					Take precautions.

APPENDIX B (continued)

	Very Inaccurate 1		Moderately Inaccurate 2		Neither 3		Moderately Accurate 4		Very Accurate 5	
1	2	3	4	5						Continue until everything is perfect.
1	2	3	4	5						Start conversations.
1	2	3	4	5						Waste my time.
1	2	3	4	5						Will not probe deeply into a subject.
1	2	3	4	5						Like to tidy up.
1	2	3	4	5						Demand perfection in others.
1	2	3	4	5						Am not interested in abstract ideas.
1	2	3	4	5						Do improper things.
1	2	3	4	5						Put little time and effort into my work.
1	2	3	4	5						Take tasks too lightly.
1	2	3	4	5						Get caught up in my problems.
1	2	3	4	5						Can't make up my mind.
1	2	3	4	5						Do not plan ahead.
1	2	3	4	5						Make insightful remarks.
1	2	3	4	5						Say inappropriate things.
1	2	3	4	5						Make plans and stick to them.
1	2	3	4	5						Follow directions.
1	2	3	4	5						Work according to a routine.
1	2	3	4	5						Love large parties.
1	2	3	4	5						Have a poor vocabulary.
1	2	3	4	5						Make rash decisions.
1	2	3	4	5						Like to plan ahead.
1	2	3	4	5						Want every detail taken care of.
1	2	3	4	5						Detect mistakes.
1	2	3	4	5						Keep myself well-groomed.
1	2	3	4	5						Make well-considered decisions.

APPENDIX C

Goal-Orientation Scale

Please use the following scale to respond to each of the statements below:

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree

1. ___ I prefer to do things that I can do well rather than things that I do poorly.
2. ___ The opportunity to do challenging work is important to me.
3. ___ When I fail to complete a difficult task, I plan to try harder the next time I work on it.
4. ___ I'm happiest at work when I perform tasks on which I know that I won't make any errors.
5. ___ I prefer to work on tasks that force me to learn new things.
6. ___ The things I enjoy the most are the things I do the best.
7. ___ The opinions others have about how well I can do certain things are important to me.
8. ___ I feel smart when I do something without making any mistakes.
9. ___ The opportunity to learn new things is important to me.
10. ___ I do my best when I'm working on a fairly difficult task.
11. ___ I like to be fairly confident that I can successfully perform a task before I attempt it.
12. ___ I try hard to improve on my past performance.
13. ___ I like to work on tasks that I have done well on in the past.
14. ___ The opportunity to extend the range of my abilities is important to me.
15. ___ When I have difficulty solving a problem, I enjoy trying different approaches to see which one will work.
16. ___ I feel smart when I can do something better than most other people.
17. ___ I believe learning and development is a vital component of this stage in my career.
18. ___ Learning new things comes easily for me.
19. ___ I usually benefit a great deal from participating in training and development programs.
20. ___ I expect that participating in the Managerial Development Program will have a noticeable positive effect on my job performance.
21. ___ I believe that participating in the Managerial Development Program is worth the effort it will require.

APPENDIX D

Feedback Session Engagement Evaluation

1. What was the participant's first reaction to your initial feedback?
 1. Participant immediately objected and argued with my feedback.
 2. Participant showed some resistance.
 3. Participant was neutral in his/her response.
 4. Participant showed some interest.
 5. Participant was enthusiastic and highly receptive.
2. How many questions did the participant ask during the feedback session?
 1. 0
 2. 1 – 2
 3. 3 – 5
 4. 6 – 10
 5. More than 10
3. Which statement best describes participant's level of interest in receiving feedback?
 1. Got upset at the feedback
 2. Not at all interested in the feedback.
 3. Listened to the feedback, but didn't respond to it.
 4. Was interested in the feedback
 5. Actively participated in the feedback session.
4. How engaged in the discussion was the participant throughout the feedback session?
 1. Not at all engaged
 2. A little bit engaged
 3. Engaged to a moderate degree
 4. A lot engaged
 5. Totally engaged
5. How aware of his or her development needs was the participant?
 1. Not at all aware
 2. A little aware
 3. Aware
 4. A lot aware
 5. Totally aware
6. To what extent did the participant express interest in his/her personal growth?
 1. Did not express any interest
 2. Expressed very little interest
 3. Expressed moderate interest
 4. Expressed high interest
 5. Expressed very high interest
7. How do you predict this participant will act in the future with regard to this program and his or her development?
 1. He or she will never look at the feedback again.
 2. He or she will shortly forget about this feedback.
 3. He or she will continue to work on development needs identified in this program.
 4. This participant will meet the goals he or she set during this program.
 5. This participant will expand on the goals set in this program and continuously set and reach additional development goals throughout his or her professional career.
8. In summary, what level of readiness to develop did this participant demonstrate?
 1. Virtually none
 2. Low
 3. Moderate
 4. High
 5. Very high

APPENDIX E

Assessment Center Exercise Rating Form

Dimension	Definition	Other Dimensions
Readiness to Develop	<ul style="list-style-type: none"> • Feedback Seeking: Seeks feedback about performance and suggestions for improvement • Acceptance of Feedback: Accepts feedback from others in a non-defensive way • Expresses interest in personal growth and improvement in performance • Interest in Development: Is open and actively involved in learning 	<ul style="list-style-type: none"> • Problem Solving • Planning and Organizing • Information Seeking • Oral Communication • Cultural Adaptability

Feedback Seeking						
Needs Improvement		Proficient			Highly Proficient	
1	2	3	4	5	6	7
Does not participate in the feedback session. Asks no questions to the Facilitator.			Is involved in the feedback session. Asks a question or two.			Ask several questions about their performance. Asks for developmental advice.

Records of evidence

Acceptance of Feedback						
Needs Improvement		Proficient			Highly Proficient	
1	2	3	4	5	6	7
Does not like what the Facilitator has to say. Rejects and disagrees with feedback given.			Listens to what Facilitator tells them. Seems to acknowledge feedback as important.			Is very open to feedback from the Facilitator and accepts developmental needs.

Records of evidence

Interest in Development						
Needs Improvement		Proficient			Highly Proficient	
1	2	3	4	5	6	7
Does not show any interest in improving or developing performance. Acts like they just want to end the session.			Shows an interest to improve his or her performance.			Expresses his/her ideas about how to improve. Actively tries to think about ways to improve. Uses all available time to their advantage.

Records of evidence

APPENDIX F

Follow-up Development Activity Evaluation

	Not at all		A fair amount		A lot
1. To what extent has the participant clarified or extended his/her personal development goals in the time since participating in the program.	1	2	3	4	5
2. To what extent has the participant discussed his/her development goals and ways to improve with others (e.g. supervisor, mentor, HR rep) in the time since the program?	1	2	3	4	5
3. Since attending the program, how many developmental activities has the participant engaged in relative to his/her development goals (e.g. If a participant has a goal to improve Planning & Organizing, then a related behavior might be "reviewing a project plan with supervisor)?	1	2	3	4	5
4. How much progress did the participant make on his/her personal goals?	1	2	3	4	5
5. To what extent do you feel the participant was trying to work towards his/her goals?	1	2	3	4	5
6. To what extent do you feel the participant is committed to his/her development?	1	2	3	4	5
7. To what extent was the participant focusing on one particular dimension?	1	2	3	4	5
8. To what extent do participants feel their development is limited by organizational resources?	1	2	3	4	5
9. To what extent do you feel that the participant felt that the MDP was a worthwhile experience?	1	2	3	4	5
10. To what extent do you feel that the participant will seek out further development opportunities?	1	2	3	4	5
11. How aware was the participants of his/her strengths and weaknesses?	1	2	3	4	5
12. To what extent does the organization seem to be supporting the participant s development (via supervisor conferences, offering further development opportunities, etc)?	1	2	3	4	5