An empirical examination of self-development activities: integrating social exchange and motivational lens

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AN EMPIRICAL EXAMINATION OF SELF-DEVELOPMENT ACTIVITIES:  
INTEGRATING SOCIAL EXCHANGE AND MOTIVATIONAL LENS

by

Kanchan Vasant Deosthali

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AN EMPIRICAL EXAMINATION OF SELF-DEVELOPMENT ACTIVITIES:
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ABSTRACT

In today’s competitive global environment, organizations are continuously seeking out ways to motivate employees to learn new skills and update existing skills. One way that employees are updating their skills are through voluntary self-development activities. The current research focuses on these behaviors, and extends prior research by developing and empirically examining a model of self-development behaviors that integrates two theoretical lenses: social exchange and motivation. The social exchange component of the model included distributive justice, procedural justice, trust, and organizational identity and the motivational component of the model focused on subjective norms, self-efficacy, need for achievement, conscientiousness, resources, and attitudes toward engagement in self-development behaviors.

Using a sample of 205 employees from several organizations in the Northeast United States, the results indicated that the combined lenses improve prediction of self-development behaviors. In addition, the results supported all relationships in the model, except for the relation between distributive justice and trust and trust and self-development behaviors. Specifically, fairness perceptions can boost employees’ organizational identification and result in increased intentions to participate in development activities. By addressing factors such as self-efficacy, organizational resources, and maintaining an environment in which self-development behaviors are
highly valued and appreciated, managers can improve employee attitudes toward self-
development behaviors, thus increasing employee intentions to participate in
development activities. Implications for research and practice as well as directions for
future research are discussed.
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CHAPTER 1: INTRODUCTION

Competent employees are an asset to organizations in today’s competitive, dynamic work environment (Davenport & Prusak, 1997). In dynamic organizations operating in rapidly changing environments, it is vital that employees keep their skills up-to-date and develop new skills to meet the challenges of technological change, competitor developments, and changing customer preferences. As a result, organizations are faced with the challenge not only of hiring the best candidates, but also encouraging current employees to continue to learn new skills and update existing skills to handle current market needs and prepare for future challenges (Levitt & March, 1988). Hence employee participation in development activities has become of interest to organizations in recent years due to the necessity of maintaining up-to-date knowledge and skills (McGrath, 2001; Vera & Crossan, 2004).

One mechanism through which this may occur is self-development. Self-development behaviors can be defined as “voluntary behaviors that employees engage in to improve their knowledge, skills and abilities so as to expand the range of one’s contributions to an organization (Podsakoff, Mackenzie, Paine, & Bachrach, 2000). Development activities can be undertaken either voluntarily by the employees or mandated by the organization (Birdi, Alan, & Warr, 1997). Self-development behaviors such as learning new levels of existing job skills or learning new skills relevant to one’s current job can be either role-prescribed or extra-role, depending upon whether or not the learning is mandated by the organization (Maurer, Shore, & Pierce, 2002). Other learning activities and experiences might not be required as part of a job responsibility, for example, voluntarily taking up challenging tasks and participating in special work
projects, which might require acquiring new skills (Maurer et al., 2002). A study by Birdi, Allan and Warr (1997) has identified five dimensions for categorizing development activities: formal/informal, voluntary/required, job-focus to non-job focus, current to future orientation, and undertaken in work-time or non-work time. The focus of dissertation research is on voluntary development activities.

Employees’ participation in development activities is the most important resource for organizations to always remain equipped to handle the market trends and fast pace of technological advancements in today’s era (Davenport & Prusak, 1997). Employees can contribute towards saving costs for the organizations by learning new skills of doing job tasks; thus improving efficiency and productivity. When employees engage in development activities on a voluntary basis, there is a high possibility that these skills will be used to improve their performance and better conform to an organizational role (Ilies, Nahrgang, & Morgeson, 2007). This might not be the case if development activities are done as a part of job requirement. Hence engagement of employees in development activities, especially voluntary development activities is of utmost importance to organizations (Edmondson, 1999, McGrath, 2001). Organizations are constantly striving to find ways to encourage employees to actively pursue development activities (Argote, 1999). Voluntary engagement of employees in self-development activity is considered one form of citizenship behavior (George & Brief, 1992, George & Jones, 1997). Self-development is also referred to as voluntary learning activities or voluntary learning behavior (Walumbwa, Cropanzano, & Hartnell, 2009).

Self-development activities are important for employee and organizational effectiveness (Cannon & Edmondson, 2001). As noted by Maurer and Tarulli (1994),
“employee participation in learning and development activity is being recognized as a critical route toward organizational competitiveness and excellence (p.3).” Self-development behaviors result in individual level outcomes like improvement in individual performance and self-improvement (Dweck, 1999). These behaviors also result in organizational level outcomes such as organizational productivity and efficiency through the acquisition of new skills (Cannon & Edmondson, 2001). Organizational productivity and efficiency may be enhanced by a) enhancing an organization's ability to adapt to environmental change by keeping abreast of the new developments in the field, an example of self-development, b) enhancing managerial and coworker productivity through acquisition of new skills or developing new levels of existing skills, c) using resources for more productive purposes, by finding out efficient ways to do the job tasks through training and acquisition of new skills, d) reducing the need to devote scarce resources to purely maintenance functions, e) facilitating the coordination of activities between team members, f) attracting and retaining high-quality employees by making the work environment a more pleasant place to work, and g) enhancing the stability of organizational performance by reducing the variability in a work unit's performance (Adler & Kwon, 2002; Coleman, 1990). Due to the indispensable role of self-development behaviors in an organization’s productivity, efficiency and survival, it is crucial for organizations to remain informed about the nature and motivational mechanisms for self-development behaviors so that they could provide a favorable atmosphere for employees to engage in self-development behaviors.
**Research Problem**

Self-development has been identified as the seventh dimension of citizenship behaviors (George & Brief, 1992; George & Jones, 1997). Self-development is one form of citizenship behavior and to date; several theories have been proposed to address the exhibition of other organizational citizenship behaviors such as altruism, civic virtue, sportsmanship, and individual initiative. At issue is whether the theories that explain the exhibition of other forms of citizenship behavior are descriptive of employees’ motivation to engage in self-development behaviors. Likewise, self-development activities, have received significantly little research interest in the training literature than have methods and media of training, skill acquisition and transfer, and training outcome assessment (Colquitt, LePine, & Noe 2000; Tannenbaum & Yukl, 1992). The focus in the training literature has been more on studying the aspects of the training process such as training outcomes and effectiveness, motivation to transfer acquired knowledge, mode of training, anxiety, cognitive ability as compared to focusing on what leads/motivates employees to participate in self-development activities such as training sessions, workshops, and seminars (Quinones, 1995; Mathieu, Tannenbaum, & Salas 1992; Noe & Schmitt, 1986).

The dissertation research focuses on adopting a different lens of looking at self-development activities i.e. studying which individual and contextual variables motivating employees to actively pursue self-development activities. Since voluntary exhibition of development activities is considered one of the dimensions of citizenship behaviors, it is essential to understand self-development behaviors, in the context of citizenship behaviors. Citizenship behaviors thus provide a theoretical lens for understanding self-
development behaviors; hence a brief understanding of the nature of citizenship behaviors becomes necessary.

**Citizenship behaviors**

Citizenship behaviors can be defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (Podsakoff et al., 2000). Organizational citizenship behaviors (OCBs) have been a topic of popular interest for organizational behavior researchers since the term was coined by Organ and his colleagues (Bateman & Organ, 1983, Smith, Organ & Near, 1983). Citizenship behaviors are extra-role behaviors that are not required as a part of formal job description. They are performed voluntarily and upon discretion of the individual. OCBs are conceptualized as behaviors that are performed with the aim of benefitting other individuals like co-workers, supervisor, and the organization. Some of the common themes underlying the construct of citizenship behaviors are helping (voluntarily helping co-workers, also referred to as altruism), sportsmanship, compliance, organizational loyalty, civic virtue, taking initiative and developing oneself. Citizenship behaviors are a topic of interest to scholars because they are influenced by employee attitudes and behavior like job satisfaction, commitment, justice perceptions, personality factors, and affect and emotions (Konovsky & Pugh, 1994, Cohen, 1980, Organ, Podsakoff, & Mackenzie, 2006).

Self-development behavior, as a form of organizational citizenship behavior, gives a competitive edge to organizations. Citizenship behaviors contribute towards
creation of social capital (Bolino, Turnley, & Bloodgood, 2002). Acquisition of new skills, a form of self-development may require maintaining good and quality relations with the co-workers and supervisors, seeking help from co-workers, in turn, building social capital for organizations (Nahapiet & Ghoshal, 1998). Employee attitudes and behavior in the form of citizenship behaviors entail a significant aspect in building social capital of organizations. Employees’ engagement in citizenship behaviors, like self-development, is important for organizational growth, success and survival in crisis situations (Bolino et al., 2002). Social capital is valuable to organizations in solving problems of co-ordination, reducing transaction costs, exchange of information between individuals, and facilitating economic and community development (Adler & Kwon, 2002; Lazega & Pattison, 2001). Citizenship behaviors are essential for organizational functioning through their relationship to social capital (Karambayya, 1998; Podsakoff & Mackenzie, 1994). The individual level outcomes of citizenship behaviors are subordinate satisfaction and performance and effects on managerial ratings (Podsakoff et al., 2009). Researchers have suggested that citizenship behaviors may contribute to overall effectiveness and performance of the organization (Karambayya, 1989; Walz & Neihoff, 2000; Koys, 2001). The significance of employees who put in extra effort on the job i.e. who can “go the extra mile” to contribute to the organization cannot be stressed enough in today’s dynamic and competitive work environment and voluntary engagement in self-development behaviors is one such behavior that goes above and beyond the call of duty (Bolino & Turnley, 2003).

Although self-development has received relatively little empirical examination in the citizenship behavior literature (Podsakoff et al., 2000; Walumbwa et al., 2009), the
scant empirical examination of self-development behaviors found in the literature warrants a thorough examination of the antecedents of self-development behaviors. To date, only a few models have attempted to thoroughly investigate the exhibition of voluntary development activities. The three major studies that have focused on self-development behaviors are Noe and Wilk model (1993), Maurer, Shore and Pierce model (2004), and Walumbwa et al. model (2009). Their models have studied self-development behaviors from two lenses: a motivational lens and a social exchange lens.

Based on the findings of these studies, individual variables, contextual variables and motivation emerge as key aspects for looking at self-development behaviors. Individual variables like self-efficacy, personal values, learning attitudes, contextual variables such as perceived benefits, perceived organizational support, perception of development needs and justice perceptions influence the participation in development activities (Noe & Wilk, 1993, Walumbwa et al., 2009; Maurer et al., 2002). The models looking at self-development behaviors from a motivational perspective have neglected the role of justice perceptions in predicting the exhibition of self-development behaviors. Likewise, the models looking at self-development behaviors from a social exchange perspective fail to consider the motivational aspect of engaging in self-development behaviors.

Essentially, the major shortcoming of each of the models is that they only used one lens at a time to study self-development behaviors, portraying only a partial picture of the antecedents of self-development behaviors. Even though the models provide valuable insights into understanding self-development behaviors, a more comprehensive and broader canvas is required to have an in-depth understanding of self-development behaviors. Hence integrating the two lenses is required for a better understanding of self-
development behaviors. The dissertation research proposes to address this gap in the literature by proposing a comprehensive model for examining self-development activities from a citizenship behavioral perspective, and integrating the motivational mechanism for engagement in self-development activities with the social exchange perspective and justice perceptions. The dissertation also aims to understand the influence of contextual and individual variables affecting the engagement of employees in self-development behaviors.

The dissertation research contributes to the citizenship behavior literature by focusing in-depth on one dimension of citizenship behavior, self-development, to have a clear and precise understanding of the role of individual and contextual variables in motivating employees to engage in self-development behaviors. The indispensable role of self-development behaviors in maintaining efficiency and productivity in organizations can be understood better by investigating underlying mechanisms/motives responsible for the exhibition of self-development behaviors. The next chapter focuses on providing literature review of self-development behaviors and a detailed description of the models of self-development behaviors.

**Organization of dissertation research**

This chapter focused on introducing the construct of self-development behavior, importance of studying self-development behavior for organizations and researchers, research problem, and the aim of dissertation research.

Chapter 2 focuses on giving an overview of the theories of citizenship behaviors, discussion of the relevant models of self-development behaviors in the literature, their
significance and relevance for the dissertation research, and provides a critical review of
the models. The chapter also provides valuable insights which guide the foundational
framework for dissertation research.

Chapter 3 focuses on describing the theory of planned behavior and further
proposing a comprehensive model of self-development behavior.

Chapter 4 focuses on the research methods for dissertation research, proposed
sample population for data collection, survey instrument for data collection, data analysis,
statistical tool used for data analysis, and description of results.

Chapter 5 focuses on discussion and interpretation of findings, implications,
strengths and weaknesses, and future scope of dissertation research.

Finally, Chapter 6 focuses on the conclusion of dissertation research.
CHAPTER 2: LITERATURE REVIEW

Chapter Overview

Chapter 2 focuses on giving an overview of the theories of citizenship behaviors, discussion of the relevant models of self-development behaviors in the literature, their significance and relevance for the dissertation research, and provides a critical review of the models. The chapter also provides valuable insights which guide the foundational framework for dissertation research.

Self-development behaviors

Self-development behaviors are the seventh dimension of citizenship behaviors. They are sometimes referred as voluntary learning behavior or voluntary learning activities (Edmondson, 1999; Maurer & Tarulli, 1994). Self-development behaviors can be defined as “all the steps that employees take to voluntarily improve their knowledge, skills and abilities to be better able to contribute to their organizations. Seeking out and taking advantage of advanced training courses, keeping abreast of the latest developments in one’s field and area, or even learning a new set of skills so as to expand the range of one’s contributions to an organization” (George & Jones, 1997; George & Brief, 1992). Participation of employees in self-development activities is becoming of interest to organizations in the recent years due to their indispensable role in improving an organization’s competitiveness, productivity and efficiency (Maurer & Tarulli, 1994; McGrath, 2001; Vera & Crossan, 2004). Self-development behaviors result in individual level outcomes like improvement in individual performance, self-development, self-improvement and organizational level outcomes like organizational productivity and efficiency (Dweck, 1999; Cannon & Edmondson, 2001). Organizational productivity and
efficiency may be enhanced by a) enhancing an organization's ability to adapt to environmental change by keeping abreast of the new developments in one’s field, an example of self-development, b) enhancing managerial and coworker productivity through acquisition of new skills or developing new levels of existing skills and c) using resources for more productive purposes, by finding out efficient ways to do the job tasks through training and acquisition of new skills (Adler & Kwon, 2002; Coleman, 1990).

Organizations are constantly trying to find ways to motivate employees to actively pursue development activities (Argote, 1999; Edmondson, 1999). Hence an in-depth knowledge about the nature and motivational mechanisms for self-development behaviors will be beneficial to organizations in devising policies and programs that would ensure employees’ participation in self-development behaviors.

Self-development behaviors have received very little empirical examination in the citizenship behavior literature as compared to other dimensions of citizenship behaviors. Since self-development behaviors incorporates acquisition of new skills, and results in beneficial outcomes not only for the organization but also personal outcomes such as self-improvement and personal growth, it is essential to understand how self-development behaviors are conceptually different from other types of citizenship behaviors (George & Jones, 1997; Podsakoff et al., 2000).

The citizenship behavior literature over the years has identified 40 different measures of OCBs, 30 specific forms with 7 common themes (LePine et al., 2002). OCBs are conceptualized as behaviors that are performed with the aim of benefitting other individuals like co-workers, supervisor and the organization. Some of the common themes underlying the construct of citizenship behaviors are helping (voluntarily helping
co-workers, also referred to as altruism), sportsmanship, compliance, organizational loyalty, civic virtue, taking initiative and developing oneself.

a) Helping: Helping involves interpersonal helping, voluntarily helping others with work-related problems or preventing the occurrence of work-related problems. Helping is also referred to as altruism and is theorized to be characterized as behaviors aimed at benefitting others without the expectation of personal gain. For example, updating co-workers who have been absent, explaining work procedures to a newly joined member of the organization etc. (George & Jones, 1997).

b) Compliance: Other than helping, behaviors like punctuality in work procedures, following rules and regulations of a company, avoiding unnecessary breaks suggest compliance and co-operation to organization’s governance. This theme captures a person’s conscientiousness about the job. This defines another common theme of citizenship behaviors named as compliance (Borman & Motowildo, 1997).

c) Sportsmanship: Sportsmanship involve personal sacrifices for the benefit of the team, not complaining at being inconvenienced by others, maintaining a positive attitude when things do not go one’s way, not taking rejection of one’s ideas personally (Podsakoff et al. 2000).

d) Organizational loyalty: Organizational loyalty entails “loyal boosterism and organizational loyalty, spreading goodwill and protecting the organization and endorsing, supporting and defending organizational objectives.” Remaining committed to the organization in crisis situations is also a behavior included in organizational loyalty (Podsakoff et al., 2000).

e) Individual initiative: This involves engaging in task behaviors more than what is
minimally expected such as being creative and innovative, putting in extra effort and enthusiasm in the job, voluntarily taking up additional responsibilities like participation in special assignments and projects and encouraging coworkers for the same (Moorman & Blakely, 1995).

f) Civic Virtue: Civic virtue can be described as willingness to participate actively in the organization’s governance (e.g., attend meetings, engage in policy debates), to monitor the external environment for threats and opportunities (e.g., keeping up with changes in the industry that might affect the organization). This also involves thinking in the best interests of the organization and caring for organization’s resources (e.g., reporting fire hazards or suspicious activities, locking doors etc.) at one’s personal expense (Graham, 1989).

g) Self-development behaviors: Self-development behaviors are described as voluntary behaviors that employees engage in to improve their knowledge, skills and abilities so as to expand the range of one’s contributions to an organization. This also involves participation in advanced training courses, developing new levels of existing skills, keeping oneself informed about the latest developments in the field (Podsakoff et al., 2000).

Since the focus of dissertation research is on addressing self-development as citizenship behaviors, it is important to understand the conceptual similarities and differences of citizenship behaviors from other related constructs such as prosocial organizational behaviors and contextual performance to have a clear idea about the rationale for considering voluntary self-development behaviors as citizenship behaviors.
Conceptual similarities and differences from other related constructs

Since its inception, much of the research on citizenship behaviors has focused more on how OCBs are related to other similar concepts like contextual performance, prosocial organizational behavior and organizational spontaneity (Organ et al., 2006). Job performance of individuals can be broadly classified into task and contextual performance (Motowild, Borman & Schmit, 1997). Task performance captures the core task activities that define the job description of an individual. Contextual performance captures the contribution of employees towards maintenance of organizational, social and psychological environment in which task performance occurs (Borman & Motowild, 1993). For example, helping and co-operating with others and carrying out task activities that are not a part of formal job requirement.

Contextual performance (CP) is similar to helping and compliance themes of citizenship behaviors. Contextual performance draws from the organizational citizenship behavior construct (Borman & Motowild, 1997). OCB framework specifies behaviors that are not rewarded by formal reward system and that are not required as a part of job description; however the CP framework does not make any reference to formal reward system or the expectations of the job description (Organ et al., 2006). Contextual performance taps into aspects other than the core job performance. Contextual performance includes behaviors like helping others, conscientiousness, taking extra efforts to get the job done, respecting authority and organizational loyalty (Borman & Motowild, 1997). Personality tests are often used to assess the contextual performance of candidates during hiring and selection procedures (Guion, 2005).
Another related construct to citizenship behaviors is prosocial organizational behaviors (POB). Generally, POB is the behavior performed with the intention of benefitting the individual or individuals to whom it is directed. The major differences between OCB and POB are that POB can include both role-prescribed and extra-role behaviors, whereas OCB by definition is extra-role (Organ, 1988). Also, OCBs are aimed at promoting the effectiveness of the organization, whereas POBs can be positive for individual but can be disadvantageous to the organization, such as providing services to clients and customers that are inconsistent with organizational procedures and policies.

Organizational spontaneity is related to citizenship behaviors in that it focuses on extra-role behaviors that contribute to organizational effectiveness (George & Jones, 1997). It includes behaviors like helping co-workers, protecting the organization, making suggestions, developing oneself and spreading goodwill. They are different from citizenship behaviors in that organizational spontaneity behaviors can be encouraged by formal reward systems; however citizenship behaviors, by definition are not rewarded.

Explaining the causes of engagement in different types of citizenship behaviors has always piqued the interest of organizational behavior scholars. Till to-date, there have been several theories, in the OCB literature, explaining the causes of OCBs – impression management (Leary & Kowalski, 1990), self-concept consistency (Shamir, 1991), altruism (Piliavin & Charng, 1990), satisfaction/mood (Organ et al., 2006), social exchange theory (Organ, 1988), attitudinal and dispositional antecedents (Konovsky & Organ, 1996), and attribution theory (Weiner, 1980). At issue is whether the theories that explain the exhibition of other forms of citizenship behavior are descriptive of employees’ motivation to engage in self-development behaviors. Also, valuable insights
from some of the theories would be useful in identifying the antecedents of self-development behaviors. Hence a review of the major theories of citizenship behavior literature is given in the subsequent paragraphs.

Prior research on citizenship behaviors have classified the antecedents of citizenship behaviors broadly in terms of individual affects and attitudes, personality/trait characteristics and feelings of reciprocity (Organ et al., 2006). Generally, survey instruments have been used to measure different forms of citizenship behaviors. Most of the research on citizenship behaviors has been correlational in nature (Podsakoff et al., 2000). The individual attitudes include job satisfaction, fairness perceptions and organizational commitment and the correlation of these variables to citizenship behaviors was in the range of 0.2 to 0.3 (Organ & Ryan, 1995). Affect included positive and negative moods. The personality factors of conscientiousness and agreeableness were found to correlate with citizenship behaviors. Since its inception, several theories have been proposed to explain the exhibition of citizenship behaviors. Of all the theories, social exchange theory is an important theory in OCB literature as it captures the nature of relationship between an employee and a supervisor (Konovsky & Pugh, 1994).

**Theories explaining the exhibition of citizenship behaviors**

**Social Exchange Theory.** Social exchange theory is one of the key theories that explain the exhibition of citizenship behaviors by employees (Konovsky & Pugh, 1994). According to this theory, an informal contract develops between employees and their supervisors (Organ, 1988). Social exchange can be defined as a relationship that accounts for future unspecified social obligations (Blau, 1964). Social exchange is
different from economic exchange in which there is certainty and specificity with regard to what commodity or service is exchanged, when it is exchanged and the value of commodity or service that is exchanged (Organ et al., 2006). On the other hand, social exchange lacks specificity in regards to what is exchanged between the two parties: employees and the organization/supervisor. Employees form exchange relationships with the supervisor and the organization that go beyond materialistic exchange (Wayne, Shore, & Liden, 1997). Thus, when the supervisor treats his/her employees fairly, a norm of reciprocity induces the employee to reciprocate the fair treatment in some way to the supervisor and to the organization by engaging in constructive behaviors like citizenship behaviors (Konovsky & Pugh, 1994; Steers, 1991). The norm of reciprocity shapes the exchange relationships between supervisor and employees (George & Jones, 1997). Engagement in self-development behaviors can be a particular way to reciprocate to the supervisor and/or organization (Settoon et al., 1996).

The social exchange relationship is found to be mediated by perceived procedural fairness and trust in the supervisor (Lind & Tyler, 1988; Konovsky & Pugh, 1994). The exhibition of OCBs depends on perception of procedural justice of the employees (Konovsky & Pugh, 1994). For example, if the employees perceive that there is procedural justice in supervisor’s decision making, then employees will be motivated to reciprocate to the supervisor or the organization by engaging in constructive behaviors like citizenship behaviors (Steers, 1991). Also, perceived fairness will enhance organizational commitment and loyalty and hence the employees who perceive fairness in workplace procedures will be more likely to stay with the organization (Folger & Konovsky, 1989).
Impression Management. Another prevalent theory in the OCB literature is the impression management theory. The exhibition of OCBs might not always stem from an individual’s desire to serve the organization or reciprocate to the organization; but it can also be a result of an impression management technique. Individuals wish to be perceived as good by other entities like individual, group, or organizational referent groups (Bolino, 1999). The motivation to control others’ perception of oneself can cause the person to engage in impression management techniques (Leary & Kowalski, 1990). In turn, the way in which people project themselves may be consistent with their own self-image (Shamir, 1991). As a result employees might engage in citizenship behaviors nearing their evaluations and performance appraisals (Bolino, 1999).

Self Concept. According to self-concept theory, an individual’s behavior is a way of expressing their self and self-concepts. Individuals have a self-image of themselves; which guides their actions and behavior (Shamir et al., 1993). Individuals engage in such behaviors that help them to maintain consistency with their self-image. Hence engagement in citizenship behaviors might be one of the means for individuals to maintain the self-image of contributing towards the organization, engaging in extra-role behaviors and being good citizens.

Personality/Trait Characteristics. Personal characteristics like conscientiousness and agreeableness have been found to correlate with OCB (Konovsky & Organ, 1996). Conscientiousness and agreeableness are two of the Big Five personality traits (Latham, 2007). Conscientiousness includes elements such as self-discipline, carefulness and thoughtfulness. The conscientiousness factor has been found to exhibit organizational citizenship behaviors like generalized compliance and civic virtue (Organ
et al., 2006). Agreeableness can be defined as likeability and getting well along with people (Organ et al., 2006). People high in agreeableness tend to exhibit more citizenship behaviors than people scoring low on this score (Organ et al., 2006). A study by Organ and Ryan (1995) found significant correlation ($r = 0.22$) between conscientiousness and altruism (Organ & Ryan, 1995). Results of meta-analysis from Ones et al. indicate that conscientiousness factor is the most valid predictor of job performance and also results in exhibition of citizenship behaviors (Ones et al., 2007, Barrick & Mount, 1991).

**Altruism.** Another theory explaining the cause of OCBs is the altruism theory. This theory is mostly used for explaining interpersonal helping. Altruism is defined as a voluntary act aimed at helping another person without expectation of personal gain (Leeds, 1963). Altruism was seen as a personality attribute that was influenced by an interaction of the characteristics of the benefactor (one who performs altruistic behavior) and the characteristics of the recipient (one who receives the help) (Piliavin & Charng, 1990). The study of altruistic behaviors as a reflection of an underlying personality attribute found that individuals high in self-esteem, high in competence, high in internal locus of control appear to engage more likely in prosocial behaviors (Piliavin & Charng, 1990). The characteristics of the benefactor like positive and negative affective states, interpersonal attractiveness of the recipient and his perceived need of aid have found to influence the act of altruism (Krebs, 1970).

**Mood and Affect.** Positive and negative mood states have been found to influence the exhibition of citizenship behaviors (Organ et al., 2006). Research has found that positive affective state resulting from successful experiences resulted in a greater effort to exhibit citizenship behaviors like helping behaviors (Berkowitz & Conner,
A study by Cohen (1980) found that people are less likely to help someone when in a bad mood. In contrast to this, some studies have found that failure results in more altruistic behaviors on the part of the person experiencing negative mood in an effort to make a temporary distraction from the negative mood (Organ et al., 2006).

**Dispositional and Attitudinal Antecedents.** Dispositional factors like conscientiousness and agreeableness have been found to correlate with OCB (Konovsky & Organ, 1996). Agreeableness can be defined as likeability and getting well along with people (Organ et al., 2006). People high in agreeableness tend to exhibit more helping behaviors than people scoring low on this score (Organ et al., 2006). Conscientiousness includes elements such as self-discipline, carefulness and thoughtfulness. The conscientiousness factor has been found to exhibit organizational citizenship behaviors like generalized compliance and civic virtue (Organ et al., 2006). Results of meta-analysis from Ones et al. (2007) indicate that conscientiousness factor is the most valid predictor of job performance and also results in exhibition of citizenship behaviors (Ones et al., 2007; Barrick & Mount, 1991).

**Attribution Theory.** Weiner’s attribution theory aids in understanding OCB. This theory is based on causal attributions that people make about their own successes and failures (Weiner & Kukla, 1970). According to this theory, individuals who attribute successes to personal capabilities and failures to lack of effort would tend to take up difficult persistent tasks and individuals who attribute their success to situational factors would display low achievement characteristics and would not persist when there are obstacles (Weiner & Kukla, 1970). Attribution theory is relevant to interpersonal helping, a form of citizenship behavior. Individuals tend to make causal attributions of others’
successes and failures while deciding to offer help. The decision to offer help depends on whether the recipient’s need is attributed as external (i.e., help is needed due to circumstances out of the control of the person needing help) or internal (when help is needed because of the recipient’s own failings) (Meyer & Mulherin, 1980). People will be more likely to help a person in need whose need is believed to be created by external circumstances rather than by internal failings (Weiner, 1980).

Thus, we can see that several theories have been used to explain the exhibition of different types of citizenship behaviors, but the theories hardly address self-development behaviors. Hence it becomes interesting to understand the mechanisms explaining the exhibition of self-development behaviors are the same as other types of citizenship behaviors. Table 1 summarizes the different theories of citizenship behaviors.
Table 1.

*Summary of different theories and different types of citizenship behaviors*

<table>
<thead>
<tr>
<th>Theories</th>
<th>Type(s) of OCB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altruism</td>
<td>Interpersonal helping</td>
</tr>
<tr>
<td>Personality and disposition factors</td>
<td>Interpersonal helping, generalized compliance, civic virtue</td>
</tr>
<tr>
<td>Mood and Affect</td>
<td>Interpersonal helping</td>
</tr>
<tr>
<td>Social Exchange</td>
<td>Explain the motivation, in general, to engage in citizenship behaviors</td>
</tr>
<tr>
<td>Attribution theory</td>
<td>Interpersonal helping</td>
</tr>
<tr>
<td>Self-concept &amp; Impression management</td>
<td>Explain the motivation, in general, to engage in citizenship behaviors</td>
</tr>
</tbody>
</table>

The subsequent paragraphs give an introduction of self-development behaviors and shed light on the few models that have been used to study voluntary learning behaviors.

**Introduction of self-development behaviors**

As discussed earlier, self-development behaviors are crucial for an organization’s growth and success. Development activities can be undertaken either voluntarily by the employees or mandated by the organization (Birdi et al., 1997). Self-development behaviors such as learning new levels of existing job skills or learning new skills relevant to one’s current job can be either role-prescribed (a part of job requirement) or extra-role (not mandated by the organization as a part of job requirement)(Maurer et al., 2002). Other learning activities and experiences might not be required as part of a job
responsibility, for example, voluntarily taking up challenging tasks and participating in special work projects, which might require acquiring new skills (Maurer et al., 2002). When self-development activities are performed by employees as extra-role behaviors, they are referred as citizenship behaviors. Self-development activities have been referred the seventh dimension of citizenship behaviors. The focus of dissertation research is on voluntary development activities.

Self-development has received little empirical support in the citizenship behavior literature. In the training literature, the study of self-development activities has focused on methods and media of training, skill acquisition and transfer, and training outcome assessment (Colquitt et al., 2000; Tannenbaum & Yukl, 1992). The focus in the training literature has been more on studying the aspects of the training process such as training outcomes and effectiveness, motivation to transfer acquired knowledge, mode of training, anxiety, cognitive ability as compared to focusing on what leads/motivates employees to participate in self-development activities such as training sessions, workshops, and seminars (Quinones, 1995; Mathieu et al., 1992; Noe & Schmidt, 1986). The dissertation adopts a different perspective by considering self-development as citizenship behaviors.

**Selection of models of self-development activities based on literature review**

The focus of the dissertation research is on studying the motivation mechanism for exhibition of voluntary development activities. According to Bandura’s social cognitive theory, a person’s behavior can be explained by interaction of individual factors, behavior and environmental factors (Bandura, 1991). Also, the role of human attitudes and behavior in explaining a person’s motivation cannot be neglected. Hence, selection of
models of self-development behavior is based on: focus on individual factors, or environmental factors and attitudinal factors, and motivation. The models that have been used to study development activities have used two lenses: models based on motivational bases for development activities and models based on social exchange perspective.

Social exchange theory described above is one of the key mechanisms for explaining the exhibition of citizenship behaviors (Podsakoff et al., 2000). Social exchange is based on perceptions of fairness in the workplace. Perceptions of distributive and procedural justice play a key role in building trust in the supervisor (Konovsky & Pugh, 1994; Bolino & Bloodgood, 2003). Since positive perceptions about the work environment are crucial for understanding the exhibition of citizenship behaviors, addressing the social exchange mechanism for understanding the exhibition of self-development behaviors is significant and cannot be ignored (Walumbwa et al., 2009).

Motivation is at the core for understanding human behavior. Studying the exhibition of any kind of human behavior would be incomplete without considering the underlying motives for exhibiting the behavior. Hence the underlying motives should also be considered to understand the engagement of employees in self-development behaviors.

The models looking at self-development behaviors from a motivational perspective have neglected the role of justice perceptions in predicting the exhibition of self-development behaviors. Likewise, the models looking at self-development behaviors from a social exchange perspective fail to consider the motivational aspect of engaging in self-development behaviors. The models have used only one lens at a time to study self-development behaviors, portraying only a partial picture of the antecedents of self-development behaviors. Even though the models provide valuable insights into
understanding self-development behaviors, a more comprehensive and broader canvas is required to have an in-depth understanding of self-development behaviors. Hence integrating the two lenses is required for a better understanding of self-development behaviors. The dissertation research proposes to address this gap in the literature by proposing a comprehensive model for examining self-development activities from a citizenship behavioral perspective, and integrating the motivational mechanism for engagement in self-development activities with the social exchange perspective and justice perceptions.


Maurer, Shore and Pierce Model (2002). Maurer, et al. model (2002) focuses on perceived beneficiary (who benefits from engagement in development activities i.e. self, supervisor or organization) at its centrality. The model proposes that the decision to engage in development activities may be influenced by personal values, perceived organizational support (POS), leader-member exchange, self-efficacy for development and the credibility of information source.

Maurer et al. model (2002) uses social exchange theory as the mechanism to explain how leader-member exchange and perceived organizational support influence participation in development activity. The model distinguishes between perceptions of
benefits for the self and benefits for the supervisor and/or the organization. The pictorial representation of the model is shown in Figure 1.

![Figure 1. Maurer, Shore and Pierce (2002) Model of Self-development Behaviors](image)

**Source:** Maurer, Shore and Pierce (2002)

**Nature of development activities.** Maurer, Shore and Pierce consider development activities, a form of prosocial organizational behavior (PSOB). Prosocial behavior can be defined as behavior directed toward an individual, group or organization and which promotes the welfare of individual, group or organization (Brief & Motowildo, 1986). Some of the examples of development activities emphasized by the authors are attending job-related training workshops, seminars, training sessions, participation in advanced training courses, keeping informed about the latest developments in one’s field, and developing new levels of existing skills required to perform the job. The authors further argue that some form of learning or development should occur for an activity to
be considered as developmental activity. The application of existing knowledge or skills is not sufficient enough for an activity to be considered as developmental.

**Perceived beneficiary of developmental activities.** According to Maurer, Shore and Pierce, employees’ knowledge of the perceived beneficiary i.e. who benefits from participation in development activities can serve as the major motivating factor for an individual to engage in development activities. A variety of personal benefits such as intrinsic benefits in the form of personal growth and development, career benefits can result from engagement in development activities (Maurer & Tarulli, 1994). The second beneficiary of development activities can be co-workers (Maurer & Palmer, 1999). The third beneficiary of development activity can be the organization, as engagement in development activities by the employees can be beneficial for organizational functioning (Katz, 1964). According to Maurer, Shore and Pierce, the valence placed on the different types of outcomes for self, supervisor or organization will influence the intentions of employees to engage in development activities.

**Perceived organizational support.** Perceived organizational support can be defined as “a global belief concerning the extent to which an organization values employee contributions and cares about their well-being” (Maurer et al., 2002). According to tenets of social exchange theory, a feeling of reciprocity towards the supervisor and/or the organization motivates the individuals to engage in such behaviors that are beneficial to the supervisor and/or the organization. Thus, employees who perceive mutual organizational support should be motivated to benefit their organizations.
**Leader-member exchange.** LMX can be defined as the quality of working relationship between a supervisor and a subordinate (Schermrhom, Hunt & Osborn, 2006). A high quality LMX is manifested in the form of social exchange relationship accounting for future unspecified obligations (Wayne, Shore, & Liden, 1997). The high exchange relationship induces feelings of reciprocity towards the supervisor and/or the organization. Hence a high quality LMX may induce employees to engage in extra-role behaviors (Settoon et al., 1996). Employees having a high positive exchange relationship with the supervisor tend to be obligated to reciprocate back to the supervisor in the form of citizenship behaviors (Deluga, 1994; Ilies, Nahrgan, & Morgeson, 2007). Thus leader-member exchange is predicted to have an impact on self-development behaviors of employees in organizations. Thus, when POS or LMX are high, employees are more likely to engage in development activities that benefit the supervisor and/or the organization, whereas when LMX or POS is low, employees are less likely to engage in development activities that benefit the organization.

**Self-efficacy.** Self-efficacy can be defined as the “beliefs in one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands.” (Wood & Bandura, 1989: 408). If an employee feels supported by the supervisor and the organization and receives resources to engage in development activities, then the employees should feel efficacious to engage in development activities. For example, employing policies rewarding employees for participation in development activities, providing tools and opportunities for development and assigning of challenging tasks to the employees by the supervisor will build the confidence of employees for
undertaking development activities. Hence it is proposed that LMX and POS will contribute to self-efficacy for successful participation in development activities.

**Perceived credibility of the source.** Information received by the employees about development activities from entities such as the supervisor and organization will shape perceptions of employees about engagement in development activities. The perceptions about the benefits and outcomes of development activities will, in turn, have an effect on the subsequent motivation to engage in development activities. The perceived credibility of the supervisor and the organization as sources of information would shape the beliefs of employees regarding development activities. High LMX and POS will positively influence perceived credibility of the supervisor and the organization as sources of information.

**Critical Review of the Model.** Maurer et al. model (2002) takes a unique perspective on development activities by focusing on the perceived beneficiary of development activity. It also contributes to the literature by conceptualizing prosocial organizational behaviors from the point of view of the actor. The model also focuses on individual characteristics like self-efficacy directly affecting development intentions and on environmental characteristics such as perceived organizational support. The model also adds the dimension of perceived credibility about the source of information about development activities. This model contributes toward understanding of development activities through the lens of perception of employees and suggests ideas for guiding the research on development activities. Even though the model focuses on LMX and perceived organizational support, it does not address the justice perceptions of employees which are a crucial part of building trust and credibility in the supervisor and the
organization. However, the biggest drawback of this model is lack of empirical evidence for the model. Hence future research could be directed towards testing parts of the model/the model for empirical support.

**Noe and Wilk Model (1993).** Noe and Wilk (1993) have also studied the factors influencing employees’ participation in development activities through the motivational perspective. The model investigates the influence of self-efficacy and work-environment characteristics on development activities. The model also tested learning attitudes, perception of development needs and perceived benefits as the mediators. Significant unique effects of work environment perceptions on development activities were found. However no significant results for the mediation were found. The significant results for the work environment perceptions on development activities draw attention to further investigate the contextual factors for predicting engagement in development activities. Contextual factors in the form of perceived peer and manager support and situational constraints such as resources and opportunities available for self-development in an organization were found to influence employees’ engagement in development activities. The pictorial representation of Noe and Wilk model is given in Figure 2.
Figure 2. Noe and Wilk Model (1993) of Self-development Behaviors

Source: Noe and Wilk (1993)
Noe and Wilk model contributes toward understanding the antecedents for participation in development activities (Noe & Wilk, 1993). The model proposes that contextual factors such as employee perceptions regarding work environment, individual factors such as self-efficacy, learning attitudes, perception of development needs and benefits and organizational membership benefits such as position, job tenure and organizational tenure have an effect on participation in development activities.

**Organizational membership characteristics.** Organizational membership characteristics such as job position, job tenure and organizational tenure are likely to influence participation of employees in development activities due to availability of opportunities based on job tenure, position and organizational tenure. Hence the model studies direct effects of organizational membership characteristics on participation in development activities (Noe & Wilk, 1993).

**Self-efficacy.** Self-efficacy can be defined as “employee’s beliefs that they can cope with challenging assignments” (Noe & Wilk, 1993). Self-efficacy has been found to predict intentions and choice to engage in and pursue a particular task (Bandura, 1977). Prior research suggests that self-efficacy predicts high levels of task performance. Empirical studies on self-efficacy have found that self-efficacy is associated with learning and achievement (Campbell & Hackett, 1986; Wood & Locke, 1987) and adaptability to new technology (Hill, Smith & Mann, 1987). Based on this, Noe and Wilk proposed an indirect influence of self-efficacy on development activities.

**Work environment characteristics.** Social support from managers and peers and situational constraints can exert influence on employees’ participation on development activities (Leibowitz, Farren & Kaye, 1986). Lack of sufficient resources to complete the
work assignments can induce feelings of dissatisfaction, frustration, in turn causing employees to perceive that situational constraints exist in the work environment (Peters & O’ Connor, 1980). Hence employees who have a perception of insufficient resources are likely to have less positive attitudes towards learning. These would affect the rate of participation in development activities (Noe & Wilk, 1993).

**Learning attitudes.** Learning attitudes incorporate the motivation to learn, motivation to transfer and prior experience of engagement in development activities. Motivation to learn has been defined as “employees’ desire to learn the content of training and development activities” (Noe, 1986). Prior studies have shown a relationship between motivation to learn and completion of training programs (Baldwin, Magjuka & Loher, 1991). Based on this, Noe and Wilk (1993) propose that motivation to learn would be positively related to participation in development activities.

Motivation to transfer is “employees’ desire to use the knowledge and skills emphasized in the development activity on the job” (p. 292, Noe & Wilk, 1993). Employees having high confidence and who perceive that the skills acquired in development activities can be successfully employed for the job task are more likely to participate in development activities. Also, employees’ evaluation of content of development activities will influence participation in development activities sponsored by the firm (Noe & Wilk, 1993). Hence learning attitudes will have a direct effect on participation in development activities.

**Perception of development needs.** Perception of development needs include awareness of development needs and the degree of agreement with the organization’s assessment of development needs. Awareness of development needs is related to an
employees’ involvement in career exploration. Self-assessment of skill strengths and weaknesses, career values, interests, goals, or plans, job-related information from counselors, friends, and family members are elements of career exploration. Awareness of development needs is essential for identifying employees’ needs and interests. Hence it is proposed that the extent of involvement in career exploration programs will have an effect on participation in development activities.

The degree of consistency between employee and organizational perceptions of development needs influences satisfaction, commitment behavior, beliefs regarding career success, and motivation to learn (Baldwin et al., 1991). Employees who perceive that the organization’s assessment of employee skills is accurate would be more likely to engage in development activities.

*Perceived Benefits.* The perceived benefits from participation in training programs include development of learning motivation, career development and psychosocial development i.e. self-actualization. Noe and Wilk (1993) propose that the more perception of personal benefits from participation in development activities, the more will be rate of engagement in development activities.

*Critical Review of the Model.* The most important finding of the study comes from unique significant effects for the attitudinal and perceptual variables. Motivation to learn, perception of social support from managers and peers and the type of working conditions were found to influence engagement in development activity. Noe and Wilk model (1993) is one of the few models on development activities that draw attention to the significance of considering not only the individual characteristics like self-efficacy but also contextual characteristics such as perception of work environment. However, the
proposed mediation did not yield significant results which warrant further investigation into the exact nature of the relationship between proposed antecedents and the outcomes. Also, the lack of generalizability across the three firms that were used in the study suggest the need for a more comprehensive and generalizable model of development activity. Perceptions of distributive and procedural justice which play a key role in perception of work environment and building trust in the supervisor have not been addressed in the Noe and Wilk model (1993). The motivation component that has been identified by the model focuses more on the evaluation and transfer of training content and does not address motivation to engage in development activities in general.

Walumbwa, Cropanzano and Hartnell (2009). The Walumbwa et al. model (2009) draws upon social exchange theory and leader member exchange mechanisms to explain the engagement of employees in voluntary development activities. It focuses on justice perceptions and exchange relationships between a supervisor and an employee to explain an individual’s intentions to engage in voluntary learning behavior. Walumbwa et al. model (2009) have proposed a model of voluntary learning behavior with workplace fairness (distributive, procedural and interactional justice) as an antecedent and voluntary learning behavior as an outcome variable. The authors further argue that organizational identification would be enhanced by distributive and procedural justice whereas quality of leader-member exchange (LMX) would be enhanced by interactional justice (Walumbwa et al., 2009). Organizational identification has been proposed to mediate the relationship between distributive justice and procedural justice and leader-member exchange has been proposed to mediate the relationship between interactional justice and voluntary learning behavior.
Walumbwa et al. model (2009) is one of the very few models that have attempted to empirically investigate the exhibition of voluntary learning behaviors. Walumbwa et al. model have identified self-development as a significant aspect of employee effectiveness and performance. Walumbwa et al. model (2009) focuses on self-development as a means to achieve effective job performance. Procedural justice, distributive justice, interactional justice, organizational identification and leader-member exchange have been identified as predictors and voluntary learning behavior and job performance have been identified as dependent variables in the model. The pictorial representation of the model is given below.
Figure 3. Walumbwa, Cropanzano, and Hartnell (2009) Model of Self-development Behaviors

Given below are the definitions of each variable with a brief description of the linkages between the variables.

**Voluntary learning behavior.** Walumbwa et al. model (2009) has adopted the definition of self-development by George and Jones (1997), which is “all steps taken to voluntarily improve their knowledge, skills, and abilities so as to be better able to contribute to their organizations.” The model uses supervisory ratings of voluntary learning behavior. According to Walumbwa et al. learning behavior has self-benefits as well as organizational benefits. Engagement of employees in development activities is one way for employees to better fit themselves in an organizational role. Voluntary learning activities can also take the form of activities which employees engage in on their own, outside of company time, that may benefit them in the current job or in the future.

**Procedural and Distributive Justice.** Procedural justice can be defined as “the degree to which policies and procedures are properly followed” (p. 356, Schermerhorn et al., 2006). Procedural justice has three elements on its centrality: the degree of neutrality exhibited by the decision maker, trust in the intentions of the decision maker and the respect shown by decision maker to the parties affected by the decision (Tyler, 1989). Procedural justice is predictor of employee attitudes (Konovsky & Pugh, 1994). According to the Walumbwa et al. model, procedural factors in the workplace enhance organizational commitment (Folger & Konovsky, 1989). Perceptions of procedural fairness imbibe trust for supervision and satisfaction with supervision in the employees. This results in exhibition of voluntary prosocial behaviors (O’Reilly & Chatman, 1986).
Distributive justice can be defined as “the perceived fairness of one’s outcomes” (Walumbwa et al., 2007). Perceptions of procedural justice and distributive justice would shape the employee’s extra-role behaviors in the form of citizenship behaviors to reciprocate back to the supervisor or organization (Organ & Moorman, 1993). According to a meta-analytic study by Cohen, Charash and Spector (2001) it was found that procedural justice (weighted mean r = 0.65) and distributive justice (weighted mean r = 0.55) were correlated to organizational commitment and trust in the supervisor.

**Interactional Justice.** Interactional justice can be defined as “the quality of interpersonal treatment received during the enactment of organizational procedures” (Rogelberg, 2007). Perceptions of interactional justice depend on the interactions between an employee and his or her supervisor (Cropanzano, Prehar & Chen, 2002). The interactional justice perceptions affect attitudes toward the person carrying out the treatment; unlike procedural justice perceptions which capture an employee’s reaction towards the employing organization (Masterson et al., 2000). Since interactional justice is based on an employee’s reaction to personal encounters with the supervisor; it has significance in determining LMX (Walumbwa et al., 2009).

**Leader Member Exchange (LMX).** LMX can be defined as the quality of working relationship between a supervisor and a subordinate (Schermerhorn et al., 2006). A high quality LMX is manifested as a social exchange relationship whereas as a low quality LMX is considered as an economic exchange (Wayne et al., 1997). Hence a high quality LMX causes the employees to engage in extra-role behaviors like citizenship behaviors (Walumbwa et al., 2009). Justice is a critical component for building mutually supportive LMXs (Scandura, 1999; Cohen-Charash & Spector, 2001). Employees with a
high positive exchange relationship with the supervisor tend to be obligated to reciprocate back to the supervisor in the form of more citizenship behaviors (Deluga, 1994, Illies et al., 2007). Thus interactional justice will predict leader-member exchange.

**Organizational Identification.** Organizational identification is feeling of “oneness” with the organization. It can be described as belongingness to a particular firm or organization (Ashforth, Harrison & Corley, 2008). According to Walumbwa et al. (2009), engaging in development activities benefits the individual self and hence it should be related to identification. Also, engaging in development activities helps an individual to better fit an individual into the organization and hence a strong sense of identification with the organization will predict engagement in development activities.

**Critical Review of the Model.** Walumbwa et al. model (2009) focuses on identifying the predictors of voluntary learning behavior through the lens of social exchange theory. Support was found for relationship between leader-member exchange and interactional justice and fairness perceptions and organizational identification. Also, fairness perceptions were found to predict voluntary learning behavior. Leader-member exchange was found to mediate the relationship between interactional justice and voluntary learning behavior and organizational identification was found to mediate the relationship between distributive and procedural justice and voluntary learning behavior (Walumbwa et al., 2009). Walumbwa et al. model (2009) does not address individual characteristics like self-efficacy which is an important predictor for task performance. Also, the model fails to address contextual variables such as opportunities or resources for development. Walumbwa et al. explain leader-member exchange as a predictor of self-development activities. Having a high exchange relationship would not necessarily
cause employees’ engagement in development activities, rather it would depend on how much support is given by the supervisor to take on challenging tasks and engage in development activities. Never the less, the model gives valuable insights on the predictors and antecedents of voluntary learning behavior.

**Contrast of the three models**

The three models discussed above focus on identifying antecedents of self-development activities. The models can be classified into two types: models based on motivational aspects and models based on Maurer, Shore and Pierce model is purely theoretical and has not been empirically tested. This model addresses the motivational aspect of self-development behaviors. Maurer et al. model (2002) draw attention to the necessity of social exchange in the form of perceived organizational and supervisor support as predictors of development activities. Noe and Wilk model (1993) and Walumbwa et al. model (2009) empirically examine the factors influencing engagement of employees in development activities. Each of the three models contribute to the research on self-development behaviors by serving as reference models since only very little research has been done on development activities from an organization behavioral perspective. The central theme of each of the three models is different. Noe and Wilk (1993) focus on individual and environmental characteristics while perceived beneficiaries is the key element of Maurer et al. model (2002); and social exchange is the basis of Walumbwa et al. model (2009). The motivational component addressed by Noe and Wilk model (1993) is limited in its focus by assessing only the motivational aspects for evaluating training transfer and content, and not motivation to engage in development activities. The three models have looked at self-development behaviors by considering
individual and organizational variables, but none of the models focus on development activities as one of the dimensions of citizenship behavior in particular.

The Walumbwa et al. model (2009) is based on social exchange theory which involved justice perceptions, trust building and formation of a psychological contract which is an ongoing process and develops over time. Hence the rate of engagement in development activities would vary over a period of time. Also, Walumbwa et al. model (2009) fails to take into consideration individual factors like self-efficacy which has been identified as a key predictor for development activities in the training motivation literature and which is also one of the key antecedents predicting participation in development activities in the Noe and Wilk model (Mathieu et al., 1992; Noe & Wilk, 1993). Also, contextual factors such as organizational resources/opportunities should also be considered for engagement in development activities, since, motivation alone would not be sufficient enough to engage oneself in development activities if there are no opportunities or resources for development. Some of the earlier studies focusing on skill updating have focused on manager support as one of the key aspects for predicting engagement in skill updating behavior, a specific form of development activity (Kozlowski & Farr, 1988; Noe & Wilk, 1993). Walumbwa et al. model (2009) adopts the tenets of leader-member exchange. Having a high exchange relationship with the supervisor may or may not motivate an individual to engage in self-development behaviors.

Thus, the three models offer valuable guidance and insights on the nature and antecedents of development activities that can guide future research on development activities. Even though, the three models have certain drawbacks, different perspectives
of the three models serve as reference in the process of further studying the self-development behavior of employees. The theoretical implications of the three models suggest the need for a more comprehensive model of self-development behaviors incorporating motivational perspective, social exchange perspective and individual and environmental characteristics. The dissertation model addresses the gaps identified in the existing models of development activities by combining the motivational lens and social exchange lens, in an attempt to better understand the exhibition of self-development activities by employees in organizations.
CHAPTER 3: DISSERTATION MODEL

In Chapter 2, I focused on the literature review incorporating an overview of the theories of citizenship behaviors, discussion of the relevant models of self-development behaviors in the literature, their significance and relevance for the dissertation research, and provided a critical review of the models.

In Chapter 3, I turn to a discussion of the guiding framework for the dissertation model. The chapter gives a brief description of social exchange theory, proposing the model for dissertation research, and theory of planned behavior. This chapter also focuses on presenting the hypotheses for the dissertation research.

Introduction

Self-development behaviors can be defined as “voluntary behaviors that employees engage in to improve their knowledge, skills and abilities so as to expand the range of one’s contributions to an organization (George & Jones, p.155). When employees engage in development activities on a voluntary basis, there is a high possibility of using those skills for improving their performance and better conforming to an organizational role (Ilies et al., 2007). This might not be the case if development activities are done as a part of job requirement. Hence engagement of employees in development activities, especially voluntary development activities is of utmost importance to organizations (Edmondson, 1999; McGrath, 2001). Organizations are constantly striving to find ways to encourage employees to actively pursue development activities (Argote, 1999). Voluntary engagement of employees in development activity i.e. self-development is considered one form of citizenship behavior (George & Brief,
Self-development has received relatively little empirical examination in the citizenship behavior literature (Podsakoff et al., 2000; Walumbwa et al., 2009). The scant empirical examination of self-development behaviors found in the literature warrants a thorough examination of the antecedents of self-development behaviors. Till to date, only a few models have attempted to thoroughly investigate the exhibition of voluntary development activities. The few models that have looked at self-development behaviors are Noe and Wilk model (1993), Maurer, Shore and Pierce model (2004), and Walumbwa et al. model (2009). The models that have studied self-development behaviors can be classified using two lenses: motivational lens and social exchange lens.

Social Exchange Perspective

Social exchange can be defined as a relationship that accounts for future unspecified social obligations (Blau, 1964). For example, when the supervisor treats his/her employees fairly, a norm of reciprocity induces the employee to reciprocate the fair treatment in some way to the supervisor and to the organization. The norm of reciprocity shapes the exchange relationships between supervisor and employees (George & Jones, 1997). Engagement in self-development behaviors can be a particular way to reciprocate the fair treatment to the supervisor and/or organization (Settoon et al., 1996).

Motivational Perspective

The Noe and Wilk model (1993) discussed in detail in Chapter 2 provides a motivational perspective to understand the exhibition of self-development behaviors. Noe
and Wilk (1993) have studied the factors influencing employees’ participation in
development activities through the motivational perspective. According to Noe and Wilk
(1993), individual characteristics such as self-efficacy and work-environment
characteristics in the form of resources, manager and co-worker support affect
employees’ attitudes and participation in development activities. The most important
finding of the study comes from unique significant effects for the attitudinal and
perceptual variables. Motivation to learn and contextual factors in the form of perceived
peer and manager support and situational constraints such as resources and opportunities
available for self-development in an organization were found to influence employees’
engagement in development activities. Noe and Wilk model is one of the few models on
development activities that draw attention to the significance of considering not only the
individual characteristics like self-efficacy but also contextual characteristics such as
perception of work environment. The significant results for the work environment
perceptions on development activities draw attention to further investigate the contextual
factors for predicting engagement in development activities. Hence the Noe and Wilk
model (1993) has also been used as the guiding framework to address the motivational
perspective in the proposed comprehensive model of self-development behaviors.

Self-development behaviors can also be considered a particular type of behavior
in which an individual engages. Therefore, an appropriate lens to study self-development
would be Ajzen’s (1985, 1991) Theory of Planned Behavior. The subsequent paragraph
gives a brief overview of the Theory of Planned Behavior.
Theory of Planned Behavior (TPB)

Ajzen’s Theory of Planned Behavior (1985, 1991) provides a useful framework to understand an individual’s motivation to engage in a particular behavior. According to Theory of Planned Behavior, three factors will predict their intentions to engage in a particular behavior: a person’s attitudes, subjective norms and perceived behavioral control.

The Theory of Planned Behavior (TPB) is a very widely used theoretical model for studying various types of behaviors. The TPB model framework has been used to predict varied behaviors like drug use, food selection, tax evasion, exercising and job seeking behavior (Hurts & Williams, 2009). For the dissertation research I am focusing on a particular behavior i.e. self-development behaviors. Hence I have used TPB model as one of the guiding framework to explain the engagement of employees in self-development behaviors. Constructs of TPB have been used to study the participation of employees in training and development activities (Maurer & Palmer, 1999; McCarthy & Garavan, 2006). The TPB constructs such as subjective norms, perceived control, attitudes towards engagement in self-development behaviors will affect employees’ participation in development activities. Therefore, as I developed my dissertation models, I used Theory of Planned Behavior to assess and guide my thoughts as I reviewed the various models which could explain self-development behavior. I briefly summarize the key factors associated with the TPB below before moving into more thorough discussion of the dissertation model.
**Attitudes.** Attitudes can be defined as an “individual’s positive or negative evaluation of performing the particular behavior of interest” (Ajzen, 1985). Attitudes can shape a person’s intention to engage in a particular behavior and are strong predictors of behavior (Eagley, 1992). Attitudes can cause people to have positive or negative disposition towards intentions to engage in a particular behavior, especially, self-development behaviors. According to TPB, an individual’s positive or negative predispositions regarding engaging in a particular behavior would predict a person’s engagement in the particular behavior.

According to TPB, the attitude toward a particular behavior is determined by the evaluation of outcomes associated with the behavior. In this case, the focus is on studying self-development behaviors. In the training motivation literature, Tharenou (2001) used constructs such as valence, instrumentality and expectancy to predict participation in development activities (Tharenou, 2001). These constructs are associated with evaluating the outcomes for expending effort in a particular behavior. Thus, more positive the attitudes toward a particular behavior the more will be the intention to engage in a particular behavior.

**Subjective Norms.** Subjective norms are one of the constructs of TPB. Subjective norms are “individual’s perception of social normative pressures, or relevant others’ beliefs that he or she should or should not perform such behavior” (Ajzen, 1985). The factor is called “subjective norm” because it involves normative beliefs. An individual’s perceptions about a particular behavior influenced by the judgment of one’s significant others such as parents, spouse, teachers, friends, and coworkers can be termed as normative beliefs (Ajzen, 1988). According to TPB, individuals perform the behavior
when they believe that significant others think that they should perform the behavior (Ajzen, 1985). Vast amount of research on TPB has supported the link between subjective norms and motivation and intentions to engage in a particular behavior (Hurts &Williams, 2009).

In a work context, the supervisor and co-workers play the role of significant others in shaping the beliefs of employees. Hence, managers and peers can have a positive influence on employees’ learning attitudes leading to higher rate of participation in development activities (Noe & Wilk, 1993). In the training motivation literature, supervisor and co-worker support has been linked to learning attitudes and training motivation (Noe & Wilk, 1993). More detailed description on subjective norms in the form of manager and peer support has been given in the section focusing on the comprehensive model of self-development behaviors.

**Perceived Behavioral Control (PBC).** Perceived behavioral control can be defined as “an individual's perceived ease or difficulty of performing the particular behavior” (Ajzen, 1985). The factors that may encourage or inhibit a person’s performance can be termed as “control beliefs” (Ajzen, 1985). In general, favorable attitude towards the behavior, favorable subjective norms, and greater the perceived behavioral control, the stronger will be a person’s intention to perform the behavior. PBC takes into consideration the realistic constraints for performing the behavior. Fishbien and Stasson (1990) have identified three possible definitions for perceived behavioral control. One is locus of control perception, self-efficacy and perceptions about the presence or absence of facilitating factors (Fishbien & Stasson, 1990). A person’s self-efficacy and resources and opportunities made available by the organization to
engage in self-development behaviors will affect a person’s engagement in self-development behaviors. Hence self-efficacy and availability of resources could be considered as dimensions of perceived behavioral control.

**Need for a comprehensive model of self-development behaviors**

As discussed in chapter 2, the models looking at self-development behaviors from a motivational perspective have neglected the role of justice perceptions in predicting the exhibition of self-development behaviors. Likewise, the models looking at self-development behaviors from a social exchange perspective fail to consider the motivational aspect of engaging in self-development behaviors. Social exchange theory focuses only on two variables (justice perceptions and trust) to explain citizenship behaviors. It does not take into account the individual and contextual variables causing engagement in citizenship behaviors (Konovsky & Pugh, 1994). Social exchange mechanism fails to address the motivational aspect of self-development behaviors. Hence only social exchange theory is not useful to understand the engagement of employees in self-development behaviors. To explain the motivational mechanism of self-development behaviors, a more comprehensive theory incorporating a broader perspective of individual and contextual variables in addition to the justice perceptions would be more justified. The models have used only one lens at a time to study self-development behaviors, portraying only a partial picture of the antecedents of self-development behaviors. Even though the models provide valuable insights into understanding self-development behaviors, a more comprehensive and broader canvas is required to have an in-depth understanding of self-development behaviors. Hence integrating the two lenses
is required for a better understanding of self-development behaviors. The dissertation research proposes to address this gap in the literature by proposing a comprehensive model for examining self-development behaviors from a citizenship behavioral perspective, and integrating the motivational mechanism for engagement in self-development behaviors with the social exchange perspective and justice perceptions. The dissertation also aims to understand the influence of contextual and individual variables affecting the engagement of employees in self-development behaviors.

**Comprehensive Model of Self-development Behaviors**

**Introduction**

The comprehensive model of self-development behaviors is based on two perspectives: the social exchange perspective and motivational perspective. The model integrates the two lenses to understand the engagement of employees in self-development behaviors. The model draws upon the social exchange theory and Noe and Wilk model as the guiding framework to address the social exchange perspective and the motivational perspective. According to the social exchange perspective, justice perceptions are a key predictor of employees’ engagement in citizenship behaviors. The Noe and Wilk model (1993) discussed in Chapter 2 also provides useful insights for understanding the antecedents of development activities in the form of self-efficacy, attitudes and perceived resources. The subsequent paragraphs explain the variables of the model in detail and present the hypotheses for the dissertation research. The model incorporates individual as well as contextual variables to explain the motivation to engage in self-development
behaviors. Figure 4 shows the diagram of comprehensive model of self-development behaviors.

![Comprehensive Model of Self-development Behaviors](image)

**Figure 4:** Comprehensive Model of Self-development Behaviors

The first part of the model is based on the social exchange perspective. Social exchange theory is a key theory that can be used to explain the exhibition of any kind of citizenship behavior. Social exchange theory captures the underlying mechanism of the relationship between employer and employees. According to this theory, an informal contract develops between employees and their supervisors (Organ, 1988). Employees form exchange relationships with the supervisor and the organization that go beyond
materialistic exchange (Wayne, Shore, & Liden, 1997). For example, if the employees perceive fair treatment in supervisor’s decision making, then employees will be motivated to reciprocate the fair treatment to the supervisor or the organization by engaging in constructive behaviors like citizenship behaviors, self-development, in the present case (Steers, 1991; O’Reilly & Chatman, 1986). Also, perceived fairness will enhance organizational commitment and loyalty and hence employees who perceive fairness in workplace procedures will be more likely to stay with the organization (Folger & Konovsky, 1989). The mechanism of social exchange theory can be understood by the justice perception of employees.

**Procedural Justice.** Procedural Justice can be defined as “the degree to which policies and procedures are properly followed” (p. 36, Schermerhorn et al. 2006). Procedural justice has three elements on its centrality: the degree of neutrality exhibited by the decision maker, trust in the intentions of the decision maker and the respect shown by decision maker to the parties affected by the decision (Tyler, 1989). Perceptions of procedural fairness imbibe trust for supervision and satisfaction with supervision in the employees. For example, according to a study by Kim and Mauborgne (1991, 1993), when managers believed that their headquarters used a fair planning process, they were more supportive of the plan, and trusted their leaders more. Trust provides the basis for social exchange and one source of trust in the employee-supervisor relationship is procedural fairness (Clark & Mills, 1979; Rousseau & Parks, 1993). According to a meta-analytic study by Cohen-Charash and Spector (2001) it was found that procedural justice (weighted mean r = 0.65) was correlated to trust in the supervisor. Thus, perceptions of procedural justice develop trust for the supervisor. Hence it is proposed that:
Hypothesis 1. Procedural justice would be positively related to trust in the supervisor.

**Distributive Justice.** Distributive justice can be defined as “the perceived fairness of one’s outcomes” (p.7, Walumbwa et al., 2007). Perceptions of distributive justice would shape the employee’s extra-role behaviors in the form of citizenship behaviors to reciprocate back to the supervisor or organization (Organ & Moorman, 1993). According to a meta-analytic study by Cohen-Charash and Spector (2001) it was found distributive justice (weighted mean r = 0.55) was correlated to organizational commitment and trust in the supervisor. Hence it is proposed that:

Hypothesis 2. Distributive justice would be positively related to trust in the supervisor.

**Trust.** Trust can be defined as “employees' willingness to be vulnerable based on expectations that the intentions, words, or actions of their supervisor can be relied upon” (p. 39, Afsar and Saeed, 2010). As described above, trust is the basis of social exchanges. The perception of fair treatment by the supervisor develops trust in the supervisor. Social exchanges will give way to more trusting relationships between supervisor and employees. Trust in the supervisor, then becomes a proximal cause of behavior (Clark & Pataki, 1995; Lewicki et al., 2006). According to social exchange, the relationship between a supervisor and employee no longer remains a materialistic exchange and are characterized by high levels of emotional connections and relational contracts (Masterson et al. 2000; Lewicki & Bunker, 1995, 1996). The relational contract between the supervisor and employees causes the employees to expend much time and
energy in the work tasks, display of more effective behaviors as compared to when the exchange is purely transactional, to be innovative in completing the tasks, and encourages employees to put in extra effort on their job in the form of OCB (Cropanzano & Rupp, 2008; Rousseau, 1995). Thus, trust being a core component of social exchanges causes the employees to reciprocate back to the supervisor by displaying effective behaviors, such as citizenship behaviors, self-development behaviors in the present case, as a means to reciprocate the fair treatment (Konovsky & Pugh, 1994). Hence it is proposed that:

**Hypothesis 3. Trust in the supervisor would be positively related to engagement of employees in self-development behaviors.**

As an alternative to trust, in the literature on citizenship behaviors, organizational identity has also been found to be affected by justice perceptions as well as mediating the relationship between justice perceptions and citizenship behaviors (Walumbwa et al., 2009). In Walumbwa et al. (2009), distributive justice and procedural justice have been identified as predictors of self-development behaviors. Because self-development is a form of citizenship behavior, it would be worthwhile to investigate the effect of organizational identification on self-development behaviors as an alternative to trust.

Specifically, organizational identification is feeling of “oneness” with the organization. It can be described as belongingness to a particular firm or organization (Ashforth et al. 2008). Organizational identification imbibes positive responses toward the organization. Engaging in development activities helps an individual to better conform to an organizational role, thus creating a strong sense of identification with the organization thus predicting engagement in self-development behaviors (Lewicki et al.,
High levels of organizational identity can motivate individuals to engage in self-development behaviors (Simpson & Macy, 2004). In a sense, it operates similarly to trust and it would be worthwhile to investigate how substituting it for trust would affect the relationships in the model.

**Subjective Norms.** In a work environment, the supervisor and co-workers play a significant role in shaping the beliefs of an individual. Hence the supervisor’s and co-workers beliefs and expectations may affect an individual’s intentions to engage in self-development behaviors. If the people who are significant to employees think that employees should participate in development activities, then employees’ should feel motivated to take part in development activities (Tharenou, 2001). This concept of supervisor and peer support is similar to subjective norms construct in TPB model. Apart from the work environment, non-work referents such as friends and family members are also likely to influence an individual’s desire to take part in development activities.

In the training motivation literature, constructs such as supervisor and co-worker support have been linked to participation in training programs (Birdi et al., 1997; Fishbein & Stasson, 1990; Noe & Wilk, 1993; Noe & Schmidt, 1986). In a work environment, the influence of supervisor and co-workers can play a significant role in shaping the perceptions and attitudes of employees with regard to engaging in a particular behavior. For example, a supervisor who thinks engaging in self-development behaviors is a waste of time, is likely to develop unfavorable attitudes for employees for engaging in self-development behaviors (Tharenou, 2001). Ford and Noe (1987) have studied attitudes towards training of employees in the form of training utility. Training utility can be defined as “individual’s attitudes towards the usefulness of training programs” (p.42,
Ford & Noe, 1987). They proposed that perceptions regarding the usefulness of training may enhance learning and transfer of acquired skills (Ford & Noe, 1987). In support of this, extending Ford and Noe’s study, managerial support was linked to training utility (attitudes) by Guthrie and Schwoerer (1994). In the present case, the focus is on studying the exhibition of self-development behaviors, hence the attitudes towards self-development are considered. Even though majority of studies in the training motivation literature have focused on motivation to learn as opposed to “attitudes”, supervisor and peer support for engaging in self-development behaviors would shape the perceptions and beliefs of employees for participation in development activities; with more support encouraging participation in development activities; and absence of support discouraging the engagement in development activities. Prior studies on engagement in voluntary behaviors have also suggested the influence of environmental characteristics like supervisor support (Peters & O’ Connors, 1980). Researchers have found that perceived presence of supervisor support have impacted trainee motivation (Clark et al., 1993). A study by Birdi et.al (1997) on development behaviors linked manager support to increased on- and off-job learning, increased development, and increased career planning (Birdi et al. 1997). In the training motivation literature, manager and peer support has been linked to participation in learning activities (Colquitt et al., 2000). The positive attitudes of trainees due to social context in the form of supervisor and co-worker support have been found to enhance training effectiveness (Noe, 1986). According to a study by Clark et al. 1993, manager support was able to emphasize the significance of training thus impacting trainee motivation (Clark et al., 1993). According to Noe & Wilk (1993),
managers and peers can have a positive influence on employees’ learning attitudes leading to higher rate of participation in development activities (Noe & Wilk, 1993).

To conclude, subjective norms such as peer and supervisor support can play a role in influencing the perceptions of employees regarding engagement in development activities. In the training motivation literature, peer and manager support has been linked to participation in learning behaviors. Hence it is proposed that:

_Hypothesis 4. Subjective norms in the form of supervisor and peer support would be positively related to employees’ attitudes toward engagement in self-development behaviors._

**Self-efficacy.** Several studies in the learning motivation literature have identified factors that influence motivation to learn (Mathieu et al.1992). These factors have included individual characteristics like locus of control, age, anxiety, cognitive ability, and self-efficacy (Colquitt et al., 2000). Studies in the training motivation literature have employed self-efficacy as one of the predictors influencing development activities (Colquitt et al., 2000). Self-efficacy can be defined as “beliefs in one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands.” (Wood & Bandura, 1989: 408). Prior research on development activities suggests self-efficacy to be a key predictor for engagement in development activities (Maurer, 2001). Self-efficacy has been found to predict intentions and choice to engage in and pursue a particular task (Bandura, 1977). Empirical studies on self-efficacy have found that self-efficacy is associated with learning and achievement (Campbell & Hackett, 1986; Wood & Locke, 1987, Colquitt et al., 2000) and adaptability to new technology (Hill et al., 1987). Individual perceptions of self-efficacy will be influenced
by four types of sources: mastery experiences, vicarious experiences, persuasion and physiological experiences (Bandura 1977). Perceptions of self-efficacy would be influenced by prior experiences of success or failure while doing a particular task or a similar kind of task (Maurer, 2001). Indirect influence of self-efficacy on development activities was studied by Noe and Wilk (1993). According to the findings in this study, high levels of self-efficacy influenced participation in development activities through learning attitudes (Noe & Wilk, 1993). Based on these, it is proposed that:

Hypothesis 5. Self-efficacy would be positively related to employees’ attitudes to engage in self-development behaviors.

Resources. Availability of resources can either encourage or constrain an individual’s engagement in extra-role behaviors such as taking up challenging tasks, assignments or projects or developing oneself (George & Jones, 1997). Prior studies on self-development activities have studied variables like manager support and situational constraints such as availability of resources (Peters & O’Connor, 1980). Situational constraints can be defined as “characteristics of a work situation that interfere with employee’s work performance” (p. 832, Mathieu et al., 1992).

In the literature, availability of resources has been referred by many names: a component of supportive work environment, support, or organizational support or component of organizational climate, situational variable or a contextual variable. The key point to note is that no matter how it has been referred in various studies, the focus has been on identifying its role in either encouraging or inhibiting engagement in training and development activities.
According to Dubin (1990), a supportive work environment in the form of company resources and opportunities would predict employees’ engagement in training and development activities (Dubin, 1990). The theoretical model of self-development behaviors by Maurer et al. 2000 also draws attention to investigate the availability of resources and opportunities for self-development behaviors as an important predictor of development activities (Maurer et al., 2000). For example, the availability of resources in the form of available opportunities for self-development or policies that provide reimbursements for expenses related to self-development activities and time allocation will increase the likelihood of engagement in voluntary development activities (George & Jones, 1997). Employees who have insufficient resources to engage in self-development behaviors would develop feelings of dissatisfaction and frustration and would tend to have less positive attitudes towards engagement in development activities (Noe & Wilk, 1993). Hence it is proposed that:

Hypothesis 6. Availability of resources for self-development would be positively related to employees’ engagement in self-development behaviors.

Need for achievement and conscientiousness. Personal characteristics like conscientiousness and agreeableness have been found to correlate with OCBs (Konovsky & Organ, 1996). In the OCB literature, the conscientiousness factor has been linked to organizational citizenship behaviors like generalized compliance and civic virtue (Organ et al., 2006). A meta-analysis of 55 studies by Organ and Ryan (1995) reported a correlation of .30 between conscientiousness and generalized compliance. Conscientiousness includes elements such as self-discipline, need for achievement,
dependability, carefulness and thoughtfulness (Hough, 1992; Hurts & Williams, 2009). Research has shown that elements of conscientiousness such as dependability and need for achievement orientation are associated with a desire to excel (Goulet & Singh, 2002; Hurts & Williams, 2009). Therefore people high in need for achievement are more likely to excel and take up challenging situations such as volunteering for special projects that require learning new skills. Individuals who have a high need for achievement would put in more effort on their jobs; and would be more likely to find ways to perform their job better such as learning new skills (Colquitt et al., 2000).

Conscientiousness has also been found to be the most stable predictor of job performance (Guion, 2005). A meta-analysis of 14 different studies by Barrick and Mount (1991) reported a corrected validity coefficient of $r = .23$ between conscientiousness and job proficiency. In the training motivation literature, the conscientiousness factor has been studied as an important predictor of motivation to learn. Research studies in the training motivation literature found that conscientiousness affected motivation to learn (Colquitt & Simmering, 1998; Colquitt et al., 2000). Engagement in self-development behaviors, by definition, involves acquiring or learning new skills, taking up challenging assignments, or volunteering for special projects that require learning new skills; learning is an important component of engagement in self-development behaviors. In addition, conscientious individuals set more challenging goals and are more committed to them (Hollenbeck & Klein, 1987). Individuals high in conscientiousness were found to have more confidence in their ability to learn the training materials, high self-efficacy and stronger desire to learn the training materials (Martocchio & Judge, 1997; Kanfer, 1991; Digman 1990).
To conclude, conscientiousness has been shown to affect motivation to learn (an attitude) in multiple studies (cf. Marcocchio & Judge, 1997; Colquitt & Simmering, 1998). Individuals high in conscientiousness are more confident, self-efficacious, have a desire to excel and more likely to handle challenging situations. Self-development behaviors, by definition, require acquisition of new skills, or updation of existing skills, which would be more likely to be exhibited by an individual possessing the elements of conscientiousness.

To summarize, it can a) be seen that need for achievement is an element of conscientiousness, b) need for achievement has been associated with a propensity to excel, take up challenging assignments and putting in more effort on the job and c) conscientiousness has been associated with motivation to learn, high self-efficacy and high confidence. Self-development behaviors require updating and learning new skills, whether required by the job or not. Hence, one can conclude that both need for achievement and conscientiousness both are important predictors of self-development behaviors. Therefore it would be worthwhile to investigate the individual and joint effects of conscientiousness and need for achievement on self-development behaviors. It is proposed that:

Hypothesis 7. Need for achievement would be positively related to employees’ attitudes to engage in self-development behaviors.

Also, for alternative models, in which need for achievement has been replaced with conscientiousness hypothesis 7 becomes:

Hypothesis 7. Conscientiousness would be positively related to employees’ attitudes to engage in self-development behaviors.
**Attitudes toward engagement in self-development behaviors.** Attitudes can be defined as an “individual’s positive or negative evaluation of performing the particular behavior of interest” (Ajzen, 1985). Attitudes can shape a person’s intention to engage in a particular behavior. Attitudes are strong predictors of behavior. Attitudes can cause people to have positive or negative disposition towards intentions to engage in self-development behaviors (Ajzen, 2001).

Motivation lies at the core of understanding human behavior and attitudes. Motivation can be defined as “the forces acting within the individual that account for the level, direction and persistence of effort expended at work “(p.120, Schermerhorn et al., 2006). In other words, motivation is “how behavior gets started, is energized, is sustained, is directed, is stopped, and what kind of subjective reaction is present in the organism while all this is going on” (p.5, Steers, 1991).

Attitudes such as motivation to learn, motivation to transfer have been studied as predictors of development activities (Noe & Schmitt, 1986). It has been found that trainee attitudes such as “motivation to learn” affected employees’ participation in training programs (Noe & Schmitt, 1986). Motivation to learn can be defined as “employees’ desire to learn the content of training and development activities” (p.292, Noe & Wilk, 1993). Several studies in the training motivation literature have linked motivation to learn and participation in training and development programs (Tharenou, 2001; Maurer & Taurulli, 1994). Studies have shown that employees’ motivation to learn is related to learning and completion of training programs (Baldwin et al., 1991, Mathieu & Martineau, 1997, Quinones, 1995; Noe & Wilk, 1993). In the present case, the focus is on studying the engagement of employees in voluntary development activities involving
learning or acquisition of new skills. Motivation to learn is only one attitude responsible for exhibition of employees in development activities. Also, according to Ajzen’s TPB model, attitudes are more proximal causes of behavior (Ajzen, 1991). However, motivation to learn is a very narrow construct which captures only the desire to learn the training materials as opposed to having positive or negative evaluations regarding a particular object. Hence, instead of just focusing on one attitude – motivation to learn, I have focused on capturing the overall degree of favorability or unfavorability regarding engagement in development behaviors, trying to capture a broader construct. Applying the relevant findings of prior literature on self-development behaviors and training motivation literature with regard to “motivation to learn” (an attitude); it is proposed that:

*Hypothesis 8. Attitudes toward engagement in self-development behaviors would be positively related to employees’ engagement in self-development behaviors.*
CHAPTER 4: METHODS, ANALYSIS, AND RESULTS

Methods

This section focuses on describing the research methods used for collecting data for the dissertation research. The section also describes the scales for the variables used for dissertation research.

Sample

The sample for the study consisted of 205 employees from several organizations in the Northeast United States. A total of 270 employees received the survey, out of which 205 employees completed the questionnaire thus yielding a response rate of 76%. The organizations included private sector organizations in healthcare, e-commerce, information technology, financial, human resources, and marketing areas. The participants were in the range of 20-56 years of age with the mean age range of (36-40) years. The types of jobs of the respondents spanned a wide variety of jobs like craft/trade (1.5%), executive (1.9%), manual (1.9%), sales (5.8%), clerical (8.3%), technicians (14.6%), managerial (19.9%), professional (40.3%). The length of employment for respondents ranged from less than 3 months to more than 8 years with mean time period of employment range of 2-4 years. The mean time period for which the respondents anticipated working for the current organization ranged from less than 1 more year to 5 or more years with the mean range of 3-5 more years. The education level of respondents also varied; 1.5% of the respondents had a doctoral degree, 9.3% had 2 year college degree, 9.8% of the respondents had some high school, GED, or a high school diploma. 11.9% of the respondents had some college education, 27.3% of the sample population
had master’s level education, and 40.2% of the sample population had 4 year undergraduate degree. Table 2 summarizes the data for each of the above variables.
Table 2

*Descriptive data of demographic variables*

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Percentage</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>1) Types of Jobs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Craft/Trade</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>b) Manual</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>c) Executive</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>d) Sales</td>
<td>6.2</td>
<td></td>
</tr>
<tr>
<td>e) Clerical</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>f) Technicians</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>g) Managerial</td>
<td>21.1</td>
<td></td>
</tr>
<tr>
<td>h) Professional</td>
<td>40.8</td>
<td></td>
</tr>
<tr>
<td>2) Age of Respondents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) 21-25</td>
<td>3.1</td>
<td>41-45 years</td>
</tr>
<tr>
<td>b) 26-30</td>
<td>8.9</td>
<td>(Range)</td>
</tr>
<tr>
<td>c) 31-35</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>d) 36-40</td>
<td>18.2</td>
<td></td>
</tr>
<tr>
<td>e) 41-45</td>
<td>16.1</td>
<td></td>
</tr>
<tr>
<td>f) 46-55</td>
<td>28.9</td>
<td></td>
</tr>
<tr>
<td>g) 56 or more</td>
<td>10.9</td>
<td></td>
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Table 2 (continued).

*Descriptive data of demographic variables*

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<th>Demographic Variables</th>
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<th>Mean</th>
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<tbody>
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<tr>
<td>a) less than 3 months</td>
<td>3.1</td>
<td>4-8 years</td>
</tr>
<tr>
<td>b) 3 months to less than 1 year</td>
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Table 2 (continued).

*Descriptive data of demographic variables*

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Procedures

The data for the dissertation research was collected as a larger part of a survey on leadership conducted at a large northeastern university. The data was collected in collaboration with MBA students at their places of employment. MBA students identified departments at their places of employment that might be willing to participate in the research study. The students then contacted the supervisors of the departments to seek approval for data collection from their subordinates. Permission was obtained from each organization by an approval letter seeking permission to gather data from the employees/subordinates. A sample approval letter can be found in Appendix A. In addition, the researcher also personally knew a few people, who were employees in organizations and were willing to fill out the survey. Of the total number of respondents, 169 came from the MBA students’ places of employment and 36 respondents came from those identified by the primary researcher.

Data was collected by using a convenience sampling technique. Convenience sampling is a technique used by the researcher because of accessibility to the sample (Bryman, 2004). Another advantage of using a convenience sample is to get a high response rate. The use of a convenience sample increases the chances of receiving all or almost all of the questionnaires back, thus ensuring a good response rate.

The questionnaire was approved by the Institutional Review Board, and presented information about who was directing the research, how the researchers could be contacted in case there were any questions about the research, and the phone number and e-mail address of the University IRB to report if there were any concerns about the research. No concerns were reported. Respondents were informed their responses were
anonymous and that information from the questionnaire would be used for research purposes only.

Each participant completed a survey whose purpose was described to them as follows: “This questionnaire asks you to describe leadership in your work group. We are trying to learn about the things that leaders do to manage work groups effectively. Other questions ask about you, the work you do, your organization and opinions you have about working. Participation in this project is voluntary.” The survey was administered in a web-based format individually to most respondents using Survey Monkey. Some employees did not have web access and completed a paper and pencil form of the survey. The survey questionnaire is presented in Appendix B.

**Measures**

The predictors for the dissertation model of self-development behaviors are: procedural justice, distributive justice, subjective norms, self-efficacy, resources, conscientiousness, need for achievement, trust, organizational identity and attitudes toward engaging in self-development behaviors. The dependent variable for the model is engagement in self-development behaviors and was assessed though both self-ratings and supervisory ratings of self-development behaviors. Each variable was measured as follows:

**Procedural Justice.** Procedural justice was measured using a five-item subset of the scale for procedural justice developed by Neihoff and Moorman’s (1993) and was a 7-point, Likert type scale ranging from 1 *(Strongly Disagree)* to 7 *(Strongly Agree)*. Items were averaged to form the overall measure, and the scale was scored so that higher scores
reflected a high degree of procedural justice. Sample items included: “Job decisions are made by my supervisor in an unbiased manner” and “All job decisions are applied consistently across all affected employees.” The internal consistency reliability estimate for this scale was .91.

**Distributive Justice.** The five-item scale for distributive justice was developed by Neihoff and Moorman (1993) and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a high degree of distributive justice. Sample items included: “I think that my level of pay is fair,” and “My work schedule is fair.” The internal consistency reliability estimate for this scale was .84.

**Trust.** The scale for trust was based on the four items of interactional justice and three items of LMX loyalty. Based on the definition of trust, it can be said trust in the supervisor would capture an a) employees’ belief about how supervisors treat them in interactions with the employees and b) faith in and loyalty to the supervisor (Dirks & Ferrin, 2001). Interactional justice can be defined as “the quality of interpersonal treatment received during the enactment of organizational procedures” (Rogelberg, 2007). Interactional justice captures the feelings about the treatment received from the supervisor when implementing organizational procedures and can be thought of assessing the trust that an employee has that their supervisor can be trusted to treat them fairly and with respect and dignity.

LMX is defined as the quality of working relationship between a supervisor and an employee (Graen & Uhl-Bien, 1991). Mutual trust, respect, affection, support and loyalty lie at the core of LMX (Yukl, 2010). Thus it can be seen that the construct of trust
has the same elements as interactional justice and LMX. Based on these, items of interactional justice and LMX were used to represent trust in the supervisor.

The first four items of the scale (interactional justice) focus on an a) individual’s belief that decisions regarding his/her job are clearly explained and b) whether the person responsible for implementing those decisions treats them with respect and dignity and were developed by Neihoff and Moorman (1993). The second aspect of trust was captured with three items from the LMX scale developed by Liden and Maslyn (1998). The last three items come from the LMX loyalty scale and focus on the subordinate’s trust in the supervisor to support and defend their work actions to a superior.

1. When decisions are made about my job, the supervisor treats me with respect and dignity.
2. When decisions are made about my job, the supervisor deals with me in a truthful manner.
3. When decisions are made about my job, the supervisor shows concerns for my rights as an employee.
4. The supervisor explains very clearly any decisions made about my job.
5. My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.
6. My supervisor would come to my defense if I were ‘attacked’ by others.
7. My supervisor would defend me to others in the organization if I made a honest mistake.
This scale was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected high level of trust in the supervisor. The internal consistency reliability estimate for the trust scale was .92.

**Subjective Norms.** The five-item measure for subjective norms was specially developed for the survey based on guidelines for constructing items by Ajzen (2001) and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected high level of subjective norms toward engagement in self-development behaviors. The internal consistency reliability estimate for this scale was .86. Because the scale was developed for this study, I am including the items below:

1) My supervisor/boss thinks that it is valuable to learn new job-related skills.
2) My co-workers think that employees should spend time learning new job-related skills
3) My supervisor/boss thinks that learning new job-related skills is a good idea
4) My co-workers think highly of individuals who learn new job-related skills

**General Self-efficacy.** The five-item measure of self-efficacy used in the survey was developed by Chen, Gully, and Eden (2001) and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a high level of self-efficacy. Sample items included: “I believe I can succeed at almost any endeavor to which I set my mind,” “When facing difficult tasks, I am certain that I will accomplish
them.” The internal consistency reliability estimate for this scale was .93.

**Perceived Organizational Resources.** The three-item measure for resources for self-development was specially developed for the survey based on guidelines for constructing the Theory of Planned Behavior questionnaire by Ajzen (2001) and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a high degree of availability of resources for engaging in self-development behaviors. The internal consistency reliability estimate for this scale was .95. The items for this new scale are given below:

1. My organization provides time for employees to develop new job skills.
2. My organization provides resources to support employees who want to develop job skills.
3. My organization provides opportunities for employees to develop job skills.

**Conscientiousness.** The ten-item measure of conscientiousness scale was developed by Goldberg (1992) and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a high degree of conscientiousness factor. Sample items included “I am always prepared,” and “I am exacting in my work.” The internal consistency reliability estimate for this scale was .79.

**Need for achievement.** The five-item scale for need for achievement was based on Steers and Braunstein’s scale “Manifest Needs” questionnaire and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Items were
averaged to form the overall measure, and the scale was scored so that higher scores reflected a higher need for achievement. Sample items included, “I enjoy setting and achieving realistic goals,” and “I enjoy a difficult challenge.” The internal consistency reliability estimate for this scale was .95.

**Attitudes toward self-development behaviors.** The four-item measure for attitudes toward self-development was specially developed for the survey based on guidelines for constructing items by Ajzen (2001) and was a 7-point, Likert type scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). This construct tapped into the affective component of attitudes and captured an individual’s overall favorability toward engagement in development activities. Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a high degree of positive attitudes toward engagement in self-development behaviors. The items for the scale are given below:

1. I like activities where I can develop job-related skills and knowledge.
2. I am excited by opportunities to learn skills at work.
3. I love to volunteer for projects and assignments that require learning new skills.
4. I like to spend time in learning new job-related skills.

The internal consistency reliability estimate for this scale was .87.

**Organizational Identity.** The six-item scale for organizational identity was the short form of the organizational commitment scale of Mowday, Steers & Porter. (Mowday, Steers & Porter, 1970). Sample items included: “I am proud to tell others that I am part of this organization,” and “I find that my values and the organization’s values are
very similar.” The scale for organizational identity was anchored on a 7 point, Likert type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a strong sense of identification with the organization. The internal consistency reliability estimate for this scale was .95.

**Self-ratings of self-development behaviors.** The six-item scale on self-development behaviors was developed based on the definition of self-development behaviors by George and Jones and Maurer, Shore and Pierce (George and Jones, 1997, Maurer, Shore and Pierce, 2002) and was anchored on a 5-point, Likert type scale ranging from 1 (Very Inaccurate) to 5 (Very Accurate). Items were averaged to form the overall measure, and the scale was scored so that higher scores on self-development scale reflected a high level of engagement in self-development behaviors. The items on self-development behavior captured the employees’ engagement in self-development activities like attending job-related training workshops, seminars, training sessions, participation in advanced training courses, keeping oneself informed about the latest developments in one’s field and developing new levels of existing skills required to perform the job. The internal consistency reliability estimate for this scale was .95. The list of self-development items is given below as in the survey questionnaire. The items were prefaced by the following statement, “To what extent do you do each of the following behaviors?”

1. Attend job-related training sessions, seminars and workshops.
2. Participate in advanced training courses.
3. Keep informed about the latest developments in your area of expertise.
4. Learn new skills relevant to your job.

5. Develop new levels of your existing skills in order to perform your job better.

6. Volunteer for special assignments or projects that require learning new skills.

**Supervisory ratings of voluntary learning behavior.** The supervisors rated their subordinate’s self-development behaviors on three aspects of self-development: learning new skills relevant to the job, attending job-related training sessions, seminars, and workshops and keeping one-self informed about the latest developments in one’s field. This scale was anchored on a 5-point, Likert type scale ranging from 1 (*Not at All*) to 7 (*Almost Always*). Items were averaged to form the overall measure, and the scale was scored so that higher scores reflected a high level of engagement by subordinates in self-development behaviors. The questions were prefaced by the following statement, “For each subordinate please circle how often the subordinate engages in each of the following behaviors.” Items included, “Learns new skills relevant to the job,” “Attend job-related training sessions, seminars and workshops,” and “Keeps informed about the latest developments in their field of expertise.” The internal consistency reliability estimate for this scale was .78. All items for all scales can be found in Appendix B.
ANALYSIS

Data were analyzed using confirmatory factor analysis using SPSS 19 and path analysis using Structural Equations Modeling (SEM) with AMOS 19.

Preliminary Analysis

Factor Analysis. Factor analysis of all the items for all variables was run to examine each construct’s convergent and discriminant validity. Convergent validity can be defined as convergence or correspondence between similar constructs and discriminant validity can be defined as discrimination between dissimilar constructs (Trochim, 2006). When the factor analysis with a varimax rotation was run, the number of factors was forced to be 11, since there are 11 constructs in the model. The results of factor analysis are given in Table 3 and are briefly summarized below:

1) The results provide evidence that subjective norms, self-efficacy, resources, attitudes, need for achievement, organizational identity, conscientiousness, and self-development behaviors load onto separate factors thus ensuring discriminant validity.

2) LMXloyalty, interactional justice, procedural justice, and two items of distributive justice load onto a same factor

3) The scale of distributive justice had five items. Two items loaded on the factor mentioned in 2) above. The remaining three items loaded onto a separate factor.
Table 3

Factor Analysis of Variables

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*Factor Analysis of Variables*

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As discussed above, I focused on trust as a composite of the scales of interactional justice and LMXloyalty. The results of factor analysis demonstrated that LMXloyalty and interactional justice load onto the same factor, which yields support for using them as a composite measure to reflect trust. Although it may seem surprising that distributive justice and procedural justice would load together on the same factor, there is some research that would suggest that they do. In the literature, interactional justice, procedural justice and distributive justice are treated as three components of fairness that tend to be correlated (Cropanzano et al., 2007). These three components could work together, however they are considered as meaningfully separate constructs since each of the constructs focuses on distinct managerial actions (Ambrose & Arnaud, 2005; Ambrose & Schminke, 2007). According to researchers, even though distributive and procedural justice is conceptually and operationally distinct constructs, they should be correlated (Tyler, 1994). Although early studies were successful in empirically distinguishing both elements of justice with only moderate correlations, the nature of the relationship is not completely clear and is often debated (Lind & Tyler, 1988). However there is consensus in the literature that distributive justice and procedural justice are positively related (Brashear et al., 2004). This explains the correlation between distributive justice and procedural justice. The next paragraph explains why procedural justice and interactional justice would be correlated.

Procedural justice judgments have been found to be influenced by how the individuals were treated during implementation of procedures (Kickul et al., 2005; Tyler 1988). It has also been found that showing respect for individuals is part of an individual’s interpretation of procedural justice (Bies et al., 1988; Bies & Moag, 1986).
This form of procedural justice which deals with the treatment received by individuals during enactment of organizational procedures is commonly referred to as interactional justice (Kickul et al., 2005; Dirks & Ferrin, 2002). Based on this, one might expect that procedural justice and interactional justice would be correlated.

Further, the first two items of distributive justice focus on pay and rewards which could be considered a part of policies and procedures followed in the work place. Hence these items are correlated with procedural justice items. The next three items of distributive justice focus on the job itself - job responsibility, work load and work schedule. This might explain why items of distributive justice were split into two factors. This might explain the loadings of interactional justice, procedural justice and two items of distributive justice onto a single factor.

To conclude, it can be seen that, in the literature, support has been found for the correlation of the three components of justice. However, since the literature also provides support for treating the three components as meaningfully distinct constructs, I have used the three components of justice as separate factors in the dissertation.

**Descriptive Statistics**

Table 4 provides the means, standard deviations, correlations, and reliabilities of the variables. The estimate for Cronbach’s alpha is given on the diagonal of the table. As noted in the Research Methods section above, the Cronbach’s alpha for all the variables were above the minimum recommended threshold of < .70 thus reflecting that the items are internally consistent.

The predictors for the dissertation model are: procedural justice, distributive
justice, self-efficacy, resources, subjective norms, conscientiousness, need for achievement, trust, organizational identity, and attitudes toward engagement in self-development behaviors. The dependent variable for the dissertation model is self-development behaviors.
Table 4

**Means, Standard deviations, Correlations and Reliabilities of Variables**

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*Note.* The reliabilities appear in bold and italics on the diagonal of the table

*p ≤ .05.  **p ≤ .01.
Table 4 (continued).

*Means, Standard deviations, Correlations and Reliabilities of Variables*

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*Note.* The reliabilities appear in bold and italics on the diagonal of the table.

*p ≤ .05.  **p ≤ .01.
Assessing Structural Model Fit with SEM

Because SEM is a newer statistical approach, I will first briefly review the chosen fit indices and why I chose each.

Assessing Model Fit

When using SEM, how well the model explains the data can be given by the overall fit of a model (Meyers, Gamst and Guarino, 2000). The main task of the model fitting approach is to determine the goodness of fit between the hypothesized model and the sample data (Bryne, 2001). Although 24 fit indices have been proposed over the last 20 years (Klem, 2000), there is not yet a general agreement on which measures are preferred (Marayuma, 1998). Due to the lack of consensus among structural equation modeling researchers; different studies report different fit indices (Meyers et al., 2000) and different researchers suggest different ways of organizing or classifying fit indices (Arbuckle, 1999). The most cited approaches appear to be the three-classification scheme (absolute, relative and parsimonious) proposed by Hair et al. (1998) and Jaccard and Wan (1996) and is the approach used in the dissertation and the two classification schema (absolute and relative) proposed by Hu and Bentler (1999). For this dissertation, I will be using the two-classification scheme. I will also be using the fit indices proposed by Gamst et al. (2000) and Kline (2005): the chi-square, the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), and the Normed Fit Index (NFI).

Absolute Fit Measures. Absolute fit measures indicate how well the proposed interrelationships between the variables match the interrelationships between the actual or
observed interrelationships. The most common absolute fit measures are chi-square, and the Root Mean Square Error of Approximation (RMSEA) (Bryne, 2001).

**Chi-square.** The chi-square test assesses the relationship between expected and observed values (Bryne, 2001). If the expected and observed values are close, then no statistical significance will be detected. The chi square is also called as minimum discrepancy and is denoted by CMIN. The chi square test compares the proposed model with the actual data. If the chi square is non-significant then the model represents the data well (Meyers et al., 2000).

The chi square test is sensitive to sample size. As sample size increases, power increases and hence the chi-square test can detect small discrepancy between the proposed model and actual data and suggest that the model does not fit the data, risking the rejection of a good-fitting model. To make the chi-square less dependent on the sample size, relative chi square can be calculated by chi-square fit index (CMIN) divided by degrees of freedom (df). If the CMIN/df ratio is 2 or less, then it reflects a good fit; if it is less than 3 it reflects an acceptable fit (Bryne, 2001). Because of the concerns regarding the sensitivity of the chi-square test to sample size, researchers recommend that this test not be the only test used to assess model fit (Raykov & Marcoulides, 2000).

**Root Mean Square Error of Approximation (RMSEA).** The RMSEA has only recently been recognized as an informative criterion in SEM and is the “average of the residuals between the observed covariance/correlation in the sample and the expected model estimated from the population” (Meyers et al., 2000). Residuals represent the error in the model. Hence, if a model fits the sample data well, then the residuals will be small;
the error would be small thus reflecting good fit of the model to the data. The guidelines for evaluating assessing the model fit by this index are as follows: values less than .08 reflect a good fit; values from .08 to .10 indicate a moderate fit and values greater than .10 indicate a poor fit.

**Relative fit measures.** Relative fit measures are also known as comparisons to baseline measures or incremental fit measures (Meyers et al., 2000). The relative fit measures used in this study are Comparative Fit Index (CFI), and Normed Fit Index (NFI).

**Comparative Fit Index (CFI).** The CFI is also known as the Bentler Comparative Fit Index. CFI compares the existing model fit with a null model which assumes the indicator variables (and hence also the latent variables) in the model are uncorrelated (the "independence model") (Meyers et al., 2000). If we assume that there are two ends of a continuum with one end reflecting a poor fit (no relationships in the data) and on the other end a perfect fit, then CFI tells the relative position on this continuum with values greater than .90 reflecting a good fit of the model to the data. The guidelines for assessing the model fit with CFI are as follows: Good fit: > .90, Adequate but marginal fit = .80 to .89, poor fit = .60 to .79 (Knight, Virdin, Ocampo & Roosa, 1994).

**Normed Fit Index (NFI).** The normed fit index (NFI), also known as the Bentler-Bonett normed fit index. NFI reflects the proportion by which the researcher's model improves fit compared to the null model. The null model assumes that there are no
relationships in the data. Hence, for instance, if NFI = .50 means the researcher’s model improves fit by 50% compared to the null model. Normed Fit Index The value of NFI between .90 and .95 indicates a good fit and values between .80 and .89 indicate an adequate but marginal fit (Bryne, 2001). Table 5 summarizes the fit indices used in the dissertation along with the criteria for each of the indices to assess model fit.

Table 5

*Fit Indices Used in Dissertation*

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Type of Fit</th>
<th>Value</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Absolute</td>
<td>Not significant</td>
<td>Good Fit</td>
</tr>
<tr>
<td>$\chi^2 / df$</td>
<td>Absolute</td>
<td>&lt;2.0</td>
<td>Good Fit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;3.0</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Absolute</td>
<td>&lt; .08</td>
<td>Good Fit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.08 - .10</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>Relative</td>
<td>&gt;.90</td>
<td>Good Fit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.08 - .89</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>Relative</td>
<td>&gt;.90</td>
<td>Good Fit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.80 - .89</td>
<td>Moderate Fit</td>
</tr>
</tbody>
</table>
Results

In addition to the model presented in Chapter 3, I also tested five alternative models. The five alternative models were based on the theory from Chapter 3. The theoretical basis for each of the alternative models is briefly reviewed prior to presenting the results of the models. For each of the models, self-reported self-development behaviors were used.

Model 1 – Dissertation Model

As discussed in Chapter 3, social exchange theory is one of the guiding models for the dissertation. This dissertation model (Model 1) was investigated first. Figure 5 shows the AMOS output with the path coefficients and correlations of exogenous variables for Model 1.
Figure 5. Structural Model Results for Dissertation Model
Model 1: Fit. Based upon the fit indices, Model 1 exhibited a good fit to the data. Although the chi square test was significant (p < .001), the relative chi square ($\chi^2$ / df = 3.21) reflects an adequate fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .94 and .95 respectively reflecting a very good fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value was .10 reflecting an adequate fit of the model to the data. The fit indices are presented in Table 6 below.

Table 6

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2$ / df</td>
<td>3.21</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.94</td>
<td>Good Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.95</td>
<td>Good Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.10</td>
<td>Moderate Fit</td>
</tr>
</tbody>
</table>

Model 1: Test of Hypotheses. Model 1 explained 38% of the variance in self-development, 61% of variance in trust and 37% of variance in attitudes toward engagement in self-development behaviors. In addition, a total of 6 out of 8 hypotheses were supported. First, the relation between procedural justice and trust ($\beta = .77$, $z = 6.06$, $p \leq .001$) was significant. Hence hypothesis 1 was supported. However, the relation between distributive justice and trust was not significant ($\beta = .02$, $z = .19$, $p = .35$). Hence hypothesis 2 was not supported. Contrary to hypothesis 3, the relation between
trust and self-development behaviors was not found to be significant ($\beta = -0.02, z = -0.20, p = 0.35$). Thus the results did not support hypothesis 2 and 3. However, the non-significant relation between distributive justice and trust is consistent with the findings of the empirical examination of the social exchange model of Konovsky and Pugh (1994), who theorized a significant relationship, but did not find one. In addition, the non-significant relation between distributive justice and trust is consistent with prior research studies examining the relation between distributive justice and trust (Kumar et al., 1995; Konovsky & Pugh, 1994; Gilliland, 1993; Sheppard et al., 1992). The non-significant relation between trust and self-development behaviors is not consistent with the findings of social exchange theory which found a positive relation between trust and self-development behaviors. However, this finding is consistent with Deluga (1994), who found that the relation between trust and citizenship behaviors was not significant.

The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = 0.33, z = 2.73, p \leq 0.001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = 0.23, z = 1.97, p \leq 0.001$). The relation between resources and self-development behaviors was significant ($\beta = 0.46, z = 3.69, p \leq 0.001$). Hence hypothesis 6 was supported. The relation between need for achievement and attitudes toward engagement in self-development behaviors was significant, thus supporting hypothesis 7 ($\beta = 0.29, z = 2.34, p \leq 0.001$). The relation between (attitudes toward engagement in self-development behaviors and self-development behaviors was significant. Thus hypothesis 8 was supported ($\beta = 0.32, z = 2.71, p \leq 0.001$).
Model 2 – Trust Replaced with Organizational Identity

The first alternative model examined used organizational identity instead of trust. As discussed in Chapter 3, Walumbwa et al. (2009) proposed organizational identification as a mediator of the relationship between justice perceptions and self-development behaviors. Engaging in development activities helps an individual to better succeed in their organizational role, creating a strong sense of identification with the organization. A strong sense of identification with the organization is in turn related to engagement in development activities (Lewicki et al., 2006; Simpson & Macy, 2004; Blau, Tatum & Ward-Cook, 2003). The literature on distributive justice and procedural justice has also shown a positive relationship between organizational identification and both types of justice (Roberts et al., 1999; Folger & Konovsky, 1989). Support for mediation of organizational identification in Walumbwa et al. model (2009) warrants testing the dissertation model with incorporating organizational identification instead of trust. Hence Model 2 incorporates organizational identification instead of trust variable. In Model 2, for hypothesis 1, 2 and 3, organizational identity replaces the trust variable in the model and changes hypothesis 2 and 3. Thus the hypothesis 1, 2 and 3 are:

Hypothesis 1: Procedural justice would be positively related to organizational identity

Hypothesis 2: Distributive justice would be positively related to organizational identity

Hypothesis 3: Organizational identity would be positively related to self-development behaviors.

The results for this model are shown in Figure 6.
Figure 6. Structural Model Results for Model 2 (Trust replaced with organizational identity)
**Model 2: Fit.** Based upon the fit indices, Model 2 exhibited a moderate fit to the data. The chi square test was significant ($p < .001$), and the relative chi square ($\chi^2/df = 6.56$) did not reflect a good fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .87 and .88 respectively reflecting an adequate fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value of .16 did not reflect a good fit of the model to the data. Based on CFI and NFI, the model is an adequate fit to the data. The table below gives the summary of fit indices for Model 2.

**Table 7**

*Model 2 Fit Indices*

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant ($p &lt; .001$)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2/df$</td>
<td>6.56</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.87</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.88</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.16</td>
<td>Not a Good Fit</td>
</tr>
</tbody>
</table>

**Model 2: Test of Hypotheses.** Model 2 explained 36% of the variance in self development, 35% of variance in organizational identity, and 37% of variance in attitudes toward engagement in self-development behaviors. All the 8 hypotheses were supported for Model 2. The relation between procedural justice and organizational identity was significant ($\beta = .37, z = 2.57, p \leq .001$). Thus hypothesis 1 was supported. The relation between organizational identity and distributive justice was significant ($\beta = .29, z = 1.99,$
Thus hypothesis 2 was supported. Also, the relation between organizational identity and self-development behaviors was found to be significant ($\beta = .13, z = 2.07, p \leq .05$). Hence hypothesis 3 was also supported.

The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = .33, z = 2.73, p \leq .001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = .23, z = 1.97, p \leq .001$). The relation between resources and self-development behaviors was significant ($\beta = .40, z = 3.23, p \leq .001$). Hence hypothesis 6 was supported. The relation between need for achievement and attitudes toward engagement in self-development behaviors was significant. Hence hypothesis 7 was supported ($\beta = .29, z = 2.34, p \leq .001$). Support for hypothesis 8 (attitudes toward engagement in self-development behaviors would be positively related to self-development behaviors) was also supported ($\beta = .28, z = 2.39, p \leq .001$).

**Comparison of Model 1 & Model 2.** Although all hypotheses were supported in Model 2, both the CFI and NFI indicate that the model fit has been reduced from a good fit to a moderate fit. So, when organizational identity is used to predict self-development behaviors, the relationship between organizational identity and self-development behaviors yielded significant results but the overall model fit was compromised. The variance in self-development behaviors by Model 2 was 36% as compared to 38% in Model 1. However, there is not much difference in the path coefficients i.e. betas as compared to Model 1. This shows that, for the current data, justice perceptions predict
organizational identity better than trust thus leading to self-development behaviors.

**Model 3 – Includes both Organizational Identity and Trust**

Since there is a theoretical basis for both organizational identity and trust affecting self-development behaviors, it would be worthwhile to investigate whether including both organizational identity and trust improved the predictive power of the model. Therefore, this model incorporated both trust and organizational identity simultaneously. In addition to the 8 hypotheses of dissertation model, there are three more hypotheses for organizational identity included here:

Hypothesis 9: Procedural justice would be positively related to organizational identity

Hypothesis 10: Distributive justice would be positively related to organizational identity

Hypothesis 11: Organizational identity would be positively related to self-development

The path diagram with the path coefficients for Model 3 is shown in Figure 7.

---

1 Hypotheses 8, 9 and 10 were tested in Model 2 as hypotheses 1, 2, and 3; however since this model incorporates both trust and organizational identity, these three hypotheses were re-labeled as 9, 10, and 11.
Figure 7. Structural Model Results for Model 3 (Includes both trust and organizational identity)
**Model 3: Fit.** Based upon the fit indices, Model 3 exhibited a moderate fit to the data. The chi square test was significant (p < .001), and the relative chi square ($\chi^2$/df 5.36) did not reflect a good fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .88 and .89 respectively reflecting an adequate fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value of .14 did not reflect a good fit of the model to the data. Based on CFI and NFI, the model is an adequate fit to the data. The fit indices for Model 3 are given in Table 8.

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2$/df</td>
<td>5.36</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.89</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.88</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.14</td>
<td>Not a Good Fit</td>
</tr>
</tbody>
</table>

**Model 3: Test of Hypotheses.** Model 3 explained 36% variance in self-development behaviors, 35% variance in organizational identity, 61% variance in trust, and 37% variance in attitudes. In addition 8 out of 11 hypotheses were supported. The relation between procedural justice and trust ($\beta = .77, z = 6.05, \ p \leq .001$) was significant. Hence hypothesis 1 was supported. However, the relation between distributive justice and trust was not significant ($\beta = .02, z = .18, \ p = .36$). Hence hypothesis 2 was not supported. The relation between trust and self-development behaviors was not found to
be significant. Hence hypothesis 3 was not supported ($\beta = -.05, z = -.42, p = .20$).

The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = .33, z = 2.73, p \leq .001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = .23, z = 1.97, p \leq .001$). The relation between resources and self-development behaviors was significant ($\beta = .41, z = 3.17, p \leq .001$). Hence hypothesis 6 was supported. The relation between need for achievement and attitudes toward engagement in self-development behaviors was significant. Hence hypothesis 7 was supported ($\beta = .29, z = 2.34, p \leq .001$). The relation between attitudes toward engagement in self-development behaviors and self-development behaviors was significant. Hence hypothesis 8 was also supported ($\beta = .29, z = 2.46, p \leq .001$).

The relation between procedural justice and organizational identity was significant ($\beta = .36, z = 2.55, p \leq .001$). Hence hypothesis 9 was supported. Relation between organizational identity and distributive justice was significant ($\beta = .30, z = 2.10, p \leq .001$). Thus hypothesis 10 was supported. Also, the relation between organizational identity and self-development behaviors was found to be significant ($\beta = .14, z = 2.22, p \leq .01$). Hence hypothesis 11 was also supported.

Models 1, 2, and 3 represent the core of the theoretical models examined in this research. It can be seen that when trust is incorporated as predictor of self-development behaviors, the relation between distributive justice and trust and trust and self-development behaviors was not significant. However, when trust was replaced with
organizational identity, it predicted self-development behaviors, but reduced model fit. When both trust and organizational identity were incorporated simultaneously, the results were not different as compared to when organizational identity and trust were tested individually.

**Model 4 - Replacing Need for Achievement with Conscientiousness**

Another potential change to the dissertation model is the replacement of need for achievement with conscientiousness. As discussed in Chapter 3, highly conscientiousness people would put in more effort on their jobs and would be more likely to find ways to perform their job better. Learning new skills might be one of the ways to improve the job skills and perform better (Guion, 2005; Fright & Ferris, 1999). Hence, to create Model 4, conscientiousness was included in Model 2 instead of need for achievement and organizational identity was tested. The results for Model 4 are shown in Figure 8.
Figure 8. Structural Model Results for Model 4 (Need for achievement replaced with conscientiousness)
Model 4: Fit. Based upon the fit indices, Model 4 exhibited a moderate fit to the data. The chi square test was significant (p < .001), and the relative chi square ($\chi^2/df = 7.2$) did not reflect a good fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .86 and .87 respectively reflecting an adequate fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value of .17 did not reflect a good fit of the model to the data. Based on CFI and NFI, the model is an adequate fit to the data. The fit indices for Model 4 are given in Table 9.

Table 9

Model 4 Fit Indices

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2/df$</td>
<td>7.29</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.86</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.87</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.17</td>
<td>Not a Good Fit</td>
</tr>
</tbody>
</table>

Model 4: Test of Hypotheses. Model 4 explained 36% variance in self-development, 31% variance in attitudes, and 35% variance in organizational identity. All 8 hypotheses were supported. The relation between procedural justice and organizational identity was significant ($\beta = .37, z = 2.57, p \leq .001$). The relation between organizational identity and distributive justice was found significant ($\beta = .29, z = 1.99, p \leq .001$). Thus
hypothesis 2 was supported. Also, the relation between organizational identity and self-development behaviors was found to be significant ($\beta = .13$, $z = 2.06, p \leq .01$). Hence hypothesis 3 was also supported.

The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = .37$, $z = 3.07, p \leq .001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = .26$, $z = 1.97, p \leq .001$). The relation between resources and self-development behaviors was significant ($\beta = .40$, $z = 3.23, p \leq .001$). Hence hypothesis 6 was supported. The relation between conscientiousness and attitudes toward engagement in self-development behaviors was significant. Hence hypothesis 7 was supported ($\beta = .14$, $z = 1.04, p \leq .05$). The relation between attitudes toward engagement in self-development behaviors and self-development behaviors was significant supporting hypothesis 8 ($\beta = .28$, $z = 2.38, p \leq .001$).

The results did not significantly differ by incorporating conscientiousness instead of need for achievement in the model, but the path coefficient ($\beta = .14$) for conscientiousness was smaller than that of need for achievement ($\beta = .29$). This means, in the model with organizational identity, substituting need for achievement with conscientiousness did not increase the predictive power of the model. The results were similar to Model 2.
Model 5 – Model 2 with both conscientiousness and need for achievement

In Model 5, a key question was whether conscientiousness and need for achievement both were important antecedents to attitudes or, as discussed in Chapter 3, they tapped similar areas in their effect on attitudes toward self-development. Therefore, this model incorporates both conscientiousness and need for achievement simultaneously with organizational identity. Model 5 is similar to Model 2 with the addition of conscientiousness variable. Figure 9 shows the results of path analysis for Model 5.
Figure 9. Structural Model Results for Model 5 (Includes conscientiousness, need for achievement and organizational identity)
**Model 5: Fit.** Based upon the fit indices, Model 5 exhibited a moderate fit to the data. The chi square test was significant (p < .001), and the relative chi square ($\chi^2/df = 6.67$) did not reflect a good fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .86 and .87 respectively reflecting an adequate fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value of .16 did not reflect a good fit of the model to the data. Based on CFI and NFI, the model is an adequate fit to the data. The fit indices for Model 5 are given in Table 10.

Table 10

**Model 5 Fit Indices**

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2/df$</td>
<td>6.67</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.86</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.87</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.16</td>
<td>Not a Good Fit</td>
</tr>
</tbody>
</table>

**Model 5: Test of Hypotheses.** Model 5 explained 36% variance in self-development, 38% variance in attitudes, and 36% variance in organizational identity. All 9 hypotheses were supported. The relation between procedural justice and organizational identity was significant ($\beta = .37, z = 2.57, p \leq .001$). Thus hypothesis 1 was supported. The relation between organizational identity and distributive justice was significant ($\beta = \ldots$
Thus hypothesis 2 was supported. Also, the relation between organizational identity and self-development behaviors was found to be significant ($\beta = .13$, $z = 2.07$, $p \leq .05$). Hence hypothesis 3 was also supported.

The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = .31$, $z = 2.61$, $p \leq .001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = .19$, $z = 3.05$, $p \leq .001$). The relation between resources and self-development behaviors was significant ($\beta = .40$, $z = 3.23$, $p \leq .001$). Hence hypothesis 6 was supported. The relation between need for achievement and attitudes toward engagement in self-development behaviors was not significant. Hence hypothesis 7 was supported ($\beta = .28$, $z = 2.28$, $p \leq .001$). The relation between attitudes toward engagement in self-development behaviors and self-development behaviors was significant ($\beta = .28$, $z = 2.39$, $p \leq .001$) thus supporting hypothesis 8. The relation between conscientiousness and attitudes toward engagement in self-development behaviors was significant. Hence hypothesis 9 was supported ($\beta = .11$, $z = 1.97$, $p \leq .05$).

When both conscientiousness and need for achievement are included in the model, support for all hypotheses was found. The results were similar to Model 2. The explained variance in attitudes was 38% as compared to 37% in Model 2. In addition, the explained variance in self-development was 36% in both Model 2 and Model 5. Thus, it can be seen that the 1% increase in variance in attitudes due to the addition of conscientiousness variable did not increase the variance in self-development behaviors.
Hence adding conscientiousness to the model did not increase the predictive power of the model.

**Model 6 – Model 1 with both conscientiousness and need for achievement**

Finally, Model 6 tested conscientiousness and need for achievement with trust variable. This is similar to Model 1, except that conscientiousness has also been added to the model. As discussed earlier, both trust and organizational identification are affected by justice perceptions. Thus, Model 6 incorporated need for achievement and conscientiousness with justice perceptions affecting trust rather than organizational identity.

**Model 6: Fit.** Based upon the fit indices, Model 6 exhibited a good fit to the data. The chi square test was significant (p < .001), and the relative chi square (χ²/df =3.77) did not reflect a good fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .94 and .93 respectively reflecting a good fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value of .11 reflected an adequate fit of the model to the data. Based on CFI and NFI, the model is a good fit to the data. The fit indices for Model 6 are given in Table 11.
The results of this analysis were similar to Model 1 for hypotheses supported and model fit. The relation between conscientiousness and attitudes toward engagement in self-development behaviors was significant ($\beta = .11, z = 1.79, p \leq .05$). Model 6 explained 38% variance in attitudes as compared to 37% in Model 1. However, this 1% increase in variance in attitudes did not reflect increase in variance in self-development behaviors. The explained variance for self-development behaviors was 38% in both Model 1 and Model 6. *This means that in the presence of need for achievement, conscientiousness* did not increase the predictive power of the model.

**Summary of Results for all the models**

The results of model fit and hypotheses for Models 1 through Model 6 are summarized in Table 12 below.

---

**Table 11**

*Model 6 Fit Indices*

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2 / df$</td>
<td>3.77</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.94</td>
<td>Good Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.93</td>
<td>Good Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.11</td>
<td>Moderate Fit</td>
</tr>
</tbody>
</table>

---


Table 12

**Summary Table for Results of Path Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fit</th>
<th>Hypotheses Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Good Fit</td>
<td>6 out of 8</td>
</tr>
<tr>
<td>Model 2</td>
<td>Moderate Fit</td>
<td>8 out of 8</td>
</tr>
<tr>
<td>Model 3</td>
<td>Moderate Fit</td>
<td>9 out of 11</td>
</tr>
<tr>
<td>Model 4</td>
<td>Moderate Fit</td>
<td>8 out of 8</td>
</tr>
<tr>
<td>Model 5</td>
<td>Moderate Fit</td>
<td>9 out of 9</td>
</tr>
<tr>
<td>Model 6</td>
<td>Good Fit</td>
<td>7 out of 9</td>
</tr>
</tbody>
</table>
Supplemental Analysis

Models based on modifying the scale for trust

Although the scale for trust exhibited acceptable reliability and validity, the items were formed by averaging together interactional justice and LMX loyalty items. Therefore I ran the models using either LMX loyalty or interactional justice items to confirm that the scale type would not affect outcomes. The results of these two models were similar to the results of Model 1 in terms of model fit and hypotheses supported.

Combining Supervisor and Self-Ratings of Self-Development

The second type of supplemental analysis that I ran focused on the supervisor ratings of self-development behaviors. As part of data collection, supervisory ratings of self-development behaviors were also collected for 169 employees. Therefore supplemental analysis was performed for Model 1, Model 2, and Model 3 using the combined supervisory and self-ratings of self-development behaviors as the dependent variable.
Model 7 - Combined Self and Supervisor Ratings for Model 1

The results yielded by testing this model were similar to Model 1. The path diagram for the model is shown in Figure 10.
Figure 10: Structural Model Results for Model 7 (self-ratings, supervisory ratings and trust)
**Model 7: Fit.** Based upon the fit indices, Model 7 exhibited a moderate fit to the data. Although the chi square test was significant (p < .001), the relative chi square ($\chi^2$/df = 2.20) reflects an adequate fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .96 and .93 respectively reflecting a good fit of the model to the data. Root Mean Square Error of Approximation (RMSEA) value of .08 reflected a moderate fit of the model to the data. Based on CFI and NFI, the model is a good fit to the data. The fit indices for Model 7 are given in Table 13.

Table 13

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>$\chi^2$/df</td>
<td>2.20</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.96</td>
<td>Good Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.93</td>
<td>Good Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.08</td>
<td>Moderate Fit</td>
</tr>
</tbody>
</table>

**Model 7: Test of Hypotheses.** The relation between procedural justice and trust was significant ($\beta = .78$, $z = 6.04$, p ≤ .001), thus supporting H1. The relation between trust and distributive justice was not significant ($\beta = .01$, $z = .10$; p= .44). Thus hypothesis 2 was not supported. Also, the relation between trust and self-development behaviors was not significant ($\beta = -.07$, $z = -.41$, p = .20). Hence hypothesis 3 was not supported.
The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = .22$, $z = 3.33$, $p \leq .001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = .20$, $z = 3.01$, $p \leq .01$). The relation between resources and self-development behaviors was significant ($\beta = .52$, $z = 2.11$, $p \leq .05$). Hence hypothesis 6 was supported. The relation between need for achievement and attitudes toward engagement in self-development behaviors was significant. Hence hypothesis 7 was supported ($\beta = .42$, $z = 2.88$, $p \leq .001$). The relation between attitudes toward engagement in self-development behaviors and self-development behaviors was significant thus supporting hypothesis 8 ($\beta = .38$, $z = 2.04$, $p \leq .05$).

The results were similar to Model 1. The relation between distributive justice and trust and self-development behaviors was not significant. Thus, the combined measure of self-ratings and supervisory ratings of self-development suggest that the same pattern emerges as when only self-ratings of self-development behaviors are used for analysis.
Model 8 - Combined Self and Supervisor Ratings for Model 2

This model is similar to Model 2 except that the construct of self-development behaviors is a reflective measure of both self-ratings and supervisory ratings of self-development behaviors. The path diagram for the model is shown in Figure 11.
Figure 11. Structural Model Results for Model 8 (self-ratings, supervisory ratings, and organizational identity)
**Model 8: Fit.** Based upon the fit indices, Model 8 exhibited a moderate fit to the data. The chi square test was significant (p < .001), and the relative chi square (χ² / df = 4.00) did not reflect a good fit of the model to the data. The values for Comparative Fit Index (CFI) and Normed Fit Index (NFI) were .88 and .86 respectively reflecting a moderate fit of the model to the data. The Root Mean Square Error of Approximation (RMSEA) value of .13 reflected a moderate fit of the model to the data. Based on CFI and NFI, the model is an adequate fit to the data. The fit indices for Model 8 are given in Table 14.

Table 14

*Model 8 Fit Indices*

<table>
<thead>
<tr>
<th>Fit Index</th>
<th>Value</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>χ²</td>
<td>Significant (p &lt; .001)</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>χ² / df</td>
<td>4.00</td>
<td>Not a Good Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>.88</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>NFI</td>
<td>.86</td>
<td>Moderate Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>.13</td>
<td>Moderate Fit</td>
</tr>
</tbody>
</table>

**Model 8: Test of Hypotheses.** The relation between procedural justice and organizational identity was significant (β = .36, z = 2.21, p ≤ .001). Thus hypothesis 1 was supported. Relation between organizational identity and distributive justice was significant (β = .28, z = 3.44, p ≤ .001). Thus hypothesis 2 was supported. The relation between organizational identity and self-development behaviors was not significant (β = .14, z = .70, p = .09). Hence hypothesis 3 was not supported.
The relation between subjective norms and attitudes toward engagement in self-development behaviors was significant ($\beta = .22$, $z = 3.32$, $p \leq .001$). Hence hypothesis 4 was supported. The relation between self-efficacy and attitudes toward engagement in self-development behaviors was significant supporting hypothesis 5 ($\beta = .20$, $z = 3.01$, $p \leq .01$). The relation between resources and self-development behaviors was significant ($\beta = .45$, $z = 2.02$, $p \leq .05$). Hence hypothesis 6 was supported. The relation between need for achievement and attitudes toward engagement in self-development behaviors was not significant. Hence hypothesis 7 was supported ($\beta = .42$, $z = 2.88$, $p \leq .001$). The relation between attitudes toward engagement in self-development and self-development behaviors was significant thus supporting hypothesis 8 ($\beta = .35$, $z = 1.97$, $p \leq .05$).

Thus, it can be seen that the model using combination of self-ratings and supervisory ratings of self-development behaviors and organizational identity, the relation between organizational identity and self-development behaviors was not significant unlike when only self-ratings were used.

**Attitudes as a Partial Mediator of the Subjective Norms => Self-Development Relation**

The dissertation model focused on attitudes toward self-development as a mediator of the relation between subjective norms and intentions to engage in self-development. As an alternative, according to TPB, individuals perform the behavior when they believe that significant others think that they should perform the behavior (Ajzen, 1985). In a work environment, the supervisor and co-workers play the role of
significant others in shaping the beliefs of employees. Hence, managers and peers can have a positive influence on employees’ intentions to participate in development activities. It is therefore possible that subjective norms in the form of peer and supervisor support may also be directly related to employees’ engagement in development activities. In this case, attitudes would only partially mediate the relation between subjective norms and self-development behaviors. Therefore, I examined whether the fit of model would be improved by the addition of the direct path from subjective norms to self-development behaviors. To test this, I ran Models 1 and 3 using self-reported development behaviors as well as Model 3 using both the self-ratings and supervisory ratings of self-development behaviors, but with the addition of the direct path between subjective norms and self-development behaviors.

The results of this analysis were similar to Models 1 and 3 in the dissertation. The explained variance in self-development behaviors for Model 1 increased to 41% (from 38%), the explained variance in self-development for model 3 increased to 39% (from 36%), and the explained variance for model 3 with self-ratings and supervisory ratings for self-development behaviors increased to 47% (from 46%). For Model 1, the relation between subjective norms and self-development was significant ($\beta = .20, z = 1.42, p \leq .01$). For Model 3, the relation between subjective norms and self-development was significant ($\beta = .19, z = 1.35, p \leq .01$). For Model 3 with both self-ratings and supervisory ratings, the relation between subjective norms to self-development behaviors was significant ($\beta = .15, z = .07, p \leq .10$). To further investigate whether adding this relation would improve fit, a chi square difference test was performed on the models comparing the fit of the model when the path from subjective norms to self-development behavior
was constrained to zero to the model where it was free to vary. The results of this analysis are given in Table 15.

Table 15

Results for the Chi Square Difference Test

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$ for Mediated Model</th>
<th>$\chi^2$ for Direct Model</th>
<th>$\chi^2$ Difference</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>41.74</td>
<td>34.10</td>
<td>7.64</td>
<td>**</td>
</tr>
<tr>
<td>Model 3</td>
<td>101.8</td>
<td>94.9</td>
<td>6.9</td>
<td>**</td>
</tr>
<tr>
<td>Model 3 w/self and supervisory ratings</td>
<td>99.54</td>
<td>97.06</td>
<td>2.48</td>
<td>*</td>
</tr>
</tbody>
</table>

**p ≤ .01, *p ≤ .10

From the chi square difference test it can be seen that for Models 1 and 3, the chi square difference test yielded significant results. For Model 3 with both self-ratings and supervisory ratings, the chi square difference test was significant at .10 level. Thus, the addition of a direct path from subjective norms to self-development behaviors improved the fit of Models 1 and 3. Thus, it can be said that attitudes partially mediate the relation between subjective norms and self-development behaviors.
Summary

This chapter presented results for the dissertation model and five alternative models based on theoretical basis. The dissertation model (Model 1) and Model 6 yielded the best fit to the data. The other alternative models yielded a moderate fit to the data. The results of Model 1, 2, and 3 showed that when organizational identity and trust were incorporated simultaneously in the model, the results did not differ as compared to when each of the construct was used independently in the model. The results of Models 4, 5, and 6 showed that when conscientiousness and need for achievement were examined simultaneously in the model, the results were similar to the results when the constructs were tested individually in the model. Further, supplementary analysis was performed to examine the results by combining supervisory ratings and self-ratings of self-development behaviors. It was found that the results did not significantly differ as compared to when only self-ratings of self-development behaviors were incorporated in the model.
CHAPTER 5: DISCUSSION

In today’s global workforce, development activities have become an important way that organizations are able to retrain employees and maintain competitiveness. Not surprisingly organizations are continuously engaged in a quest to find ways to motivate employees to pursue development activities. Prior studies looking at self-development behaviors have used only one lens to study the phenomenon. Specifically they used either social exchange theory or motivational models to look at self-development behaviors. Hence this research contributes to the understanding of self-development behaviors by proposing and empirically examining a model of self-development behaviors that integrates the social exchange lens and motivational lens into one model. In addition, five alternative models were also tested. SEM path analysis was used to test the models.

The dissertation model incorporates a social exchange lens (procedural justice, distributive justice and trust), motivational lens (subjective norms, need for achievement, self-efficacy, and attitudes), and a contextual lens (organizational resources) and their relations with self-development behaviors. The variance explained by the overall model is 38%. The variance for the integrated model is greater as compared to the models that use only the social exchange lens (8.5%), only the motivational lens (19%), or only a resources lens(29%). Although the data did not provide full support, the increase in explained variance in self-development behaviors in the overall model as compared to the explained variance of individual components shows that the integration of the two lens helps to accounts for more variance in self-development behaviors.
Despite the fact that the dissertation model did not receive full support, it did yield a good fit to the data. All the hypotheses except the hypotheses for relation between distributive justice and trust and trust and self-development behaviors were supported. In addition to this dissertation model, five alternative models were also tested. In the first alternative model (Model 2), trust was replaced by organizational identity. The results indicated that all the hypotheses were supported, but the model fit was reduced from a good fit to a moderate fit. When both organizational identity and trust were incorporated together in the model (Model 3), the results were similar as compared to when they were used individually in the model. This model yielded a moderate fit to the data and all hypotheses were supported except for the relations between distributive justice and trust and trust and self-development behaviors.

In the next alternative model (Model 4), Model 2 was updated, with need for achievement replacing conscientiousness. The results for this model were similar to the results of testing Model 2. The model yielded a moderate fit to the data and all the hypotheses were supported. In Model 5, need for achievement and conscientiousness were incorporated together with organizational identity. This model was similar to Model 2 with the addition of the conscientiousness variable. The results were similar to Model 2. All the hypotheses were supported with a moderate fit of the model to the data. Finally, Model 6 was similar to Model 1, with the addition of the conscientiousness variable. The results for Model 6 were similar to Model 1 and yielded a good fit of the model to the data. Similar to Model 1, all the hypotheses were supported except for the relation between distributive justice and trust and trust and self-development behaviors. Together,
these results suggest that conscientiousness did not add incremental validity over the 
 inclusion of need for achievement.

The subsequent paragraphs provide a detailed discussion of the research findings. 
First we focus on the findings related to the social exchange portion of the model, 
followed by a discussion related to the motivational portion of the model.

Social Exchange

As noted earlier, social exchange theory is regarded as a key theory explaining the 
engagement of employees in various types of citizenship behaviors. In this study, it 
represented the first theory which informed the development of the dissertation model. 
Specifically, a social exchange lens was used to emphasize the significance of social 
relationships in the exhibition of self-development behaviors. I briefly outline the specific 
findings below.

**Procedural justice, distributive justice, and trust.** The dissertation model 
proposed that the relation between procedural justice and trust and distributive justice 
and trust would be significant. The results of path analysis yielded support for the relation 
between procedural justice and trust. This is consistent with the findings of social 
exchange model and prior research on procedural justice and trust (Konovsky & Pugh, 
1994; Moorman, 1993). This means that if employees feel that their supervisors and 
managers treat them fairly, then they would be more likely to trust them than if they did 
not feel they were treated fairly.

The dissertation model also proposed that the relation between distributive justice 
and trust would be significant. However, the results of path analysis did not support this
hypothesized relation. Although the relationship was not significant, the results were similar to another study (Konovsky & Pugh, 1994), who also proposed a positive relationship between distributive justice and trust, but found none. This could be due to the fact that distributive justice focuses on predicting attitudes towards specific outcomes and procedural justice focuses on predicting attitudes towards authorities (Folger & Konovsky, 1989; Sheppard, Lewicki, & Minton, 1992). Although both aspects can affect trust in a supervisor, this construct is more focused on the individual rather than outcomes. Therefore, procedural justice (which is focused more on attitudes toward an individual) would be better at predicting trust in supervisor as opposed to distributive justice. Also, research studies focusing on both types of justice found that procedural justice has a stronger correlation to levels of social exchange norms than distributive justice (Tyler & Lind, 1992; Gilliland, 1993; Kumar, Scheer & Steenkamp, 1995).

**Trust and self-development behaviors.** The dissertation model proposed a positive relation between trust and self-development behaviors. However, the results of path analysis did not yield support for this relation. The social exchange model by Konovsky and Pugh (1994) found support for trust as a mediator of procedural justice and citizenship behaviors. However, the non-significant finding of relation between trust and self-development behaviors in this research is consistent with Deluga (1994) who did not find a significant relationship between trust and citizenship behaviors. In general, prior studies in the literature have yielded mixed results for the relation between trust and self-development behaviors (Dirks & Ferrin, 2001).

One of the reasons for the non-significant finding might be that self-development behaviors are a specific type of citizenship behavior which differs from other types of
citizenship behaviors such as altruism – helping other individuals, or sportsmanship – personal sacrifices for the benefit of the team, not complaining at being inconvenienced by others, and civic virtue - organization’s governance (e.g., attend meetings, engage in policy debates). Self-development behaviors are a self-oriented concept and involve developing/improving oneself to contribute to the organization. Self-development behaviors have an internal focus as compared to other citizenship behaviors. Hence, self-development behaviors may have a different motivational mechanism than other type of citizenship behaviors.

Even though, the relation between trust and engagement in self-development behaviors was not significant, social exchange is still a crucial theory to consider. First, social exchange theory has been predominantly used for explaining engagement of employees in citizenship behaviors. Second, this mechanism is valuable in understanding how economic exchanges between an employee and a supervisor or organization transform into social exchange over a period of time and motivate employees for engaging in effective work behaviors such as citizenship behaviors.

Even though, in the present study social exchange failed to operate through trust, the social exchange mechanism operated through organizational identification. Due to this, it is not possible to conclude that social exchange does not play a significant role in predicting self-development behaviors just based on the insignificant findings for trust and self-development behaviors. However, future research would be required to investigate the role of trust in predicting self-development behaviors.

Organizational identification, justice perceptions, and self-development
behaviors. Organizational identification was used as an alternative construct operating in a similar fashion as trust. The results with respect to organizational identity show that its relation between procedural justice, distributive justice, and organizational identification was each significant. Also, the relation between organizational identification and self-development behaviors was significant. This is consistent with the Walumbwa et al. model (2009) who also found a significant relation between justice perceptions and organizational identification and organizational identification and voluntary development behavior. Thus, in the present case, the results suggest that organizational identity explains more variance in self-development behaviors than trust. One potential explanation for this is that the focus of trust and organization identity differs. Trust involves beliefs toward another individual whereas organizational identity involves a self-focus, or a sense of a person identifying with or being a part of a firm or organization. Because self-development behaviors are self-oriented, it may be that the internal focus of both may enhance its relationship with organization identification, another self-oriented concept (Ashforth & Mael, 1989; Ashforth et al., 2008). In addition, individuals who are high in organizational identification may see themselves as great contributors to the firm (Walumbwa et al., 2009). Learning new job skills provides a means for them to better fit an organizational role and fill their role or identity as a contributor of the firm (Ashforth et al., 2008; Shamir, House, & Arthur, 2003).

Motivational Perspective

As noted previously, the dissertation focused on combining the motivational and social exchange lenses. This portion of the manuscript focuses on the motivational lens.
**Self-efficacy and attitudes.** The results supported the theorized relation between self-efficacy and attitudes toward engagement in self-development behaviors. The results suggest that managers should actively take part in increasing the self-efficacy of employees. Managers could increase self-efficacy of employees by assigning goals according to one’s perceived capabilities and by giving informative feedback on goal attainment (Latham, 2007). The feelings of success in reaching their goals would increase self-efficacy. In turn the employees could be encouraged to engage in increasingly difficult tasks, with their self-efficacy growing as each task were accomplished. Because self-efficacy predicts attitudes toward self-development behaviors, increasing the self-efficacy of employees could prove beneficial in building positive attitudes toward engagement in self-development behaviors.

**Subjective norms and attitudes.** The dissertation model also yielded support for the relation between subjective norms and attitudes toward engagement in self-development behaviors. This suggests that managers and peers can have a positive influence on an individual’s attitude to engage in development activities. Managers can emphasize the value of self-development to employees by creating an environment where self-development behaviors are rewarded and seen as valuable. This can also create a self-reinforcing environment where both managers and peers value training and employees feel that people important to them find self-development valuable. Creating a social and organizational environment that values learning would increase the probability of positive attitudes toward engagement in self-development behaviors.

**Need for achievement, conscientiousness, and attitudes.** In addition, need for achievement affects employee attitudes to engage in self-development behaviors and
acquire new job skills, an essential precursor for self-development activities. This suggests that employees who have a high need for achievement orientation would be desirable for organizations as they have a propensity to take up challenging assignments and pursue development activities and would be more likely to do so. However, not all employees have high need for achievement. Individuals who are lower on need for achievement would be less likely to be involved in development activities. Because need for achievement is a fairly stable aspect of personality that cannot be easily changed, organizations are faced with a challenge of how to motivate employees with lower need for achievement to participate in development activities. One of the reasons why low need for achievers might refrain from taking up development activities is fear of failure (Bartels, Magun-Jackson & Ryan, 2010).

Another important finding of this research came from replacing need for achievement with conscientiousness. Need for achievement is one of the elements of conscientiousness. Conscientiousness has been used in the training motivation literature to predict motivation to learn and in the citizenship behavior literature to predict citizenship behaviors. Need for achievement and conscientiousness both were significant predictors influencing attitudes to engage in self-development behaviors. Also, the results were similar in both the cases, indicating that replacing need for achievement with conscientiousness did not improve the predictive power of the model. Future research is required to further investigate this area.

Resources and self-development behaviors. The dissertation model also yielded support for the relation between resources and self-development behaviors. This finding suggests that organizations should provide support employees who wish to engage in
self-development activities by providing resources such as money, time, and equipment to participate in development activities. If employees have the resources to participate in development activities, then they would feel motivated to participate in development activities. Resources can either encourage or inhibit employees’ participation in development activities. As such, resources could be considered as a situational constraint.

This notion of situational constraint fits very well with the TPB framework. The perceived behavioral control of TPB takes into consideration the realistic constraints for performing the behavior. Fishbien and Stasson (1990) have identified perceptions about the presence or absence of facilitating factors as one of the elements of perceived behavioral control. Hence availability of resources could be considered as a dimension of perceived behavioral control.

**Attitudes and self-development behaviors.** The significant relation between attitudes and self-development behaviors provide evidence of the importance of attitudes in predicting participation in development activities. This finding is also consistent with the widely used TPB framework (Ajzen, 1985) for explaining the role of attitudes for engaging in a particular behavior. Together the results suggest that organizations can take steps to increase the attitudes of employees toward development activities by creating a social positive environment, encouraging an orientation toward learning, ensuring that self-development activities are perceived as valuable and useful, and providing organizational resources to make it possible for employees to actively pursue development activities.
Theoretical Contributions

Despite the importance of development activities to organizations, only limited attention has been given to self-development behaviors in the organizational behavior literature. The dissertation makes several theoretical contributions to our understanding of self-development behaviors. First, this research is the first study that integrates the social exchange and the motivational lenses to examine self-development behaviors. Previous approaches have focused on either the social exchange lens or the motivation lens. Integrating these two approaches is an important contribution because it helps to account for the shortcomings of using only one lens to examine self-development behaviors. For example, models that use a motivational lens fail to account for fairness and justice of interpersonal relationships in the work place. Similarly, the models that have examined development activities using a social exchange lens fail to account for the individual and contextual variables affecting attitudes and motivation to pursue self-development behaviors. An integrated lens broadens our understanding of self-development behaviors by combining the two different mechanisms that affect decisions to engage in these behaviors, and it provides a comprehensive view of self-development behaviors for future theory development. Even though the full model was not supported, combining the two lenses increases the explained variance in self-development intentions and demonstrates the incremental value of integrating the motivational and social exchange lens.

The motivational lens used in the current research adds value to the existing literature on self-development behaviors by focusing on attitudes as a predictor of self-development behaviors. Although motivation and attitudes play an important role in
training outcomes (Colquitt et al., 2000; Noe & Wilk, 1993; Noe & Schmitt, 1986) studies in the training motivation have focused on specific attitudes such as motivation to learn.

This study utilized attitudes toward engagement in self-development behaviors rather than focusing on a specific attitude (e.g. motivation to learn), which has more typically been used in the training literature. Motivation to learn is a narrow construct and captures only the desire to learn the training materials or content. As such, it focuses on a very minor part of predispositions toward engaging in self-development behaviors. Attitudes, on the other hand, can focus more broadly on an employee’s overall perceptions and beliefs regarding pursuing development activities. For example, as illustrated in the study, if employees do not feel that development activities are valuable, then they might not feel motivated to participate in these activities or transfer the newly learned skills to their job tasks. Thus, by focusing more broadly on attitudes, and by being informed by the Theory of Planned Behavior (TPB), this research also contributes to our understanding of the role of attitudes and their relation to self-development activities.

In addition, this study expands our understanding of self-development behaviors by focusing on perceived resources and social pressure (e.g. subjective norms). As noted by Ajzen (1985, 1991), even if an individual has a positive inclination to engage in self-development behaviors, if they do not have the resources to undertake development activities, a positive attitude becomes meaningless. Also, the role of significant others in the workplace such as supervisors and peers can boost participation of employees in development activities. This is consistent with Ajzen’s TPB framework, which identifies
subjective norms and perceived behavioral control - availability of resources, in the present case, as important predictors shaping attitudes of individuals engaging in development behaviors. The findings in this research regarding subjective norms and resources are also consistent with prior studies examining development activities which studied supervisor and peer support and availability of resources as antecedents of development activities (Noe & Wilk, 1993).

The model also serves as a good starting point and a foundational framework for undertaking future research aimed at examining self-development behaviors with different populations and specific development activities. The key social exchange variables, justice perceptions, can help build a strong identification of employees with the organization. The significant findings for justice perceptions and organizational identification demonstrate that social exchange may play a pivotal role in predicting development activities. But, instead of operating through trust in supervisor, as proposed by social exchange theory (Konovsky & Pugh, 1994), the results suggest that it operates through organizational identification (Walumbwa et al., 2009).

Till-to-date, the literature on citizenship behaviors has been dominated by a universal look at citizenship behaviors in which social exchange theory is considered as the key theory to explain the exhibition of employees in citizenship behaviors. However, the findings regarding social exchange from the present study suggest that this perspective might be inappropriate. An important implication of this is that different types of citizenship behaviors have different motivational mechanisms. Hence caution should be taken when applying the motivational mechanism of one citizenship behavior to another.
Practical Implications

The research findings have several practical implications for managers as well. The research findings regarding social exchange and motivational lens provide guidelines for supervisors, managers, and organizations on creating a learning environment that can motivate employees to participate in development activities. Because fairness perceptions affect employees’ intentions to participate in development activities, managers should be careful when making decisions regarding employees. Actions such as treating employees with respect and dignity when implementing decisions or involving employees in the decision making process can improve perceptions of fairness. In addition, managers should be aware of their biases and consciously attempt to overcome biases while implementing work procedures. Managers should base their decisions only on accurate information and have some mechanism in place to correct flawed decisions. Most importantly while implementing any decisions, managers should adhere to prevailing code of ethics and morality in the workplace (Colquitt et al. 2001; Leventhal et al., 1980). Even though these recommendations are valuable and guide managers how to make fair decisions, it might be difficult to implement these in a real world organizational setting characterized by complex organizational processes and dynamic human relationships. Despite the complexity, and possibly because of the complexity, of implementing processes such as this, managers should carefully consider how they are implementing decisions in the workplace.

The significant relation between self-efficacy and attitudes toward engagement in self-development behaviors suggests that self-efficacy is an important predictor of attitudes to engage in development activities. Managers can play an active role in
increasing the self-efficacy of employee by creating an environment that encourages employees to increase their self-efficacy to pursue development activities. Bandura’s social cognitive theory suggests four ways for improving self-efficacy (Johnson & Marakas, 2000, Gist & Mitchell, 1992, Bandura, 1997). First, prior successes or failures (i.e. enactive mastery) are a powerful predictor of self-efficacy. Therefore, managers should look for ways to build self-efficacy for self-development by encouraging employees to participate in simple tasks in which they can succeed and master. Managers can also increase the efficacy beliefs of employees by providing opportunities for employees to observe employees successfully participating in development activities. For example, employees could demonstrate their newly learned skills to other employees and discuss how the newly acquired job skills helped improve their efficiency and productivity.

Managers can also give positive feedback to employees and build efficacy beliefs by conveying to them that they are capable of learning new skills and possess the abilities to undertake development activities (e.g. verbal persuasion). Verbal persuasion from experienced significant others such as managers in the workplace can increase the efficacy beliefs of employees and encourage them to pursue development activities. Finally, to reduce learning anxiety managers can mentor, coach, and support employees in their development, hopefully reducing any concerns about their abilities to succeed in development activities.

Supervisors and peers play a central role in shaping the beliefs and perceptions of an individual in the workplace, and the results from this study suggests the need for organizations to create an environment where participation in development activities is
encouraged and seen as valuable. For example, managers can publically support those who are engaging in development activities and clearly demonstrate to employees how the newly acquired job skills improve both personal and organizational outcomes. This would help to effectively communicate the value and desirability of development activities to the employees. Another potential way that this could be accomplished is by providing employees who have participated in development activities opportunities to publically share their experiences and benefits of participation in development activities.

Creating an organizational environment where self-development is valued and encouraged should communicate to employees that participation in development activities is highly valued and would have career benefits, which in turn should affect attitudes toward self-development and increase the rate of participation.

Another factor found to affect attitudes toward engagement in development activities is need for achievement. Since individuals having a high need for achievement have a propensity to excel and take up challenging assignments they would be more likely to pursue development activities. The challenge comes for those who are lower in need for achievement, as they will be less likely to engage in self-development activities. Even though need for achievement is a relatively stable trait and cannot be changed, situational factors such as incentive value of success and probability of success affect achievement behavior (Weiten, 2010). One of the reasons why low need for achievers might refrain from taking up development activities is fear of failure (Bartels et al., 2010). Managers could mentor and coach to help them overcome their fear of failure and assign small development activities that involve learning new simple skills. Also, organizations can provide incentives in the form of monetary rewards, praise, and
recognition to their employees to encourage their participation in development activities. However, the challenge for managers in implementing this would be to devise incentives that are valuable to each employee and to do so in a way that motivates employees.

The support for direct linkage between resources and self-development behaviors identified an important contextual determinant of self-development behaviors—availability of resources. This finding suggests that organizations should maintain a favorable environment by making organizational resources available to employees for pursuing development activities. For instance, allowing employees to take time off for self-development, providing monetary support or incentives, and providing necessary equipment required for self-development are some of the strategies that can be employed.

To summarize, there are three key things to take away from this study. First, organizations should create an environment in which development activities are valued and encouraged. Second, organizations should create an environment that builds and enhances employees’ self-efficacy for learning new job skills. Third, organizations should provide employees with the resources that allow them to successfully participate in development activities. By focusing on these three major areas, organizations can create a learning environment that improves not only for organizational competitiveness, but also helps retain key employees, for whom career development and opportunities for personal growth and improvement are important.

**Limitations**

Like any research, the current study has also some limitations which affect its generalizability. First, the data collected in the present study was cross-sectional in
nature. Inferences about causality cannot be made about the relationships in the data. In addition, the rate of engagement in development activities is likely to vary over time. In addition, the past experiences of success or failure in development activities may also have an effect on attitudes and self-efficacy to pursue development activities. Hence, longitudinal data might be needed to make richer associations between the factors investigated in this study.

Second, there is always the possibility that responses obtained from the survey questionnaire may have been distorted by social desirability. Because the research focuses on asking respondents if they participate in development activities, there may have been a tendency from respondents to respond in a favorable light to the questions. Third, because the research study focused on a limited number of respondents in northeastern United States, caution should be taken in generalizing the findings to other populations and settings. To extend generalizability, a wider and more diverse sample is required.

**Future Research**

The findings and implications of this research are encouraging and point out several fruitful directions for future research. Building on the current research findings, future research could delve more deeply into theoretically explaining the relationship between organization identity and trust. As noted above the relative difference in the role of internal factors such as organization identity and external factors such as trust may mean that internally focused beliefs and relationship focused beliefs may mean that there are opportunities to more richly understand the factors underlying social exchange
processes. Investigating these differences could have implications for research focusing on other important organization outcomes such as job satisfaction, and turnover intentions. Second, similar to the research ideas surrounding trust and organization identity, future research could also examine further the equivalency of conscientiousness and need for achievement as evidenced in the current research and what this means for self-development behaviors and for organizational citizenship behaviors.

The current research focused on employees in private organizations. It would be valuable to also expand the research to different samples such as faculty and staff in academic settings to understand if the current research framework could be applied to understand the motives for engaging in development activities in academic settings. Incentives for engaging in self-development would differ for faculty and staff in academic settings as compared to employees. Consider as an example technical skills updating. Additional factors such as the characteristics of the technology (e.g. ease of use and usefulness (Davis, Bagozzi & Warshaw 1989) could also play a role. In addition, just as senior managers can delegate tasks to subordinates instead of learning new skills, faculty at some universities can delegate responsibilities for using classroom technologies such as Blackboard and Moodle to their graduate assistants. Thus, there may be unique characteristics of different types of employees and tasks which may be important to investigate.

In addition future research could focus on different types of self-development behavior and contexts, such as technology-based self-development in emerging economies. Information technology serves as a catalyst for innovation and is especially important in the transformation of emerging economies. It can create socio economic
opportunities for all including disadvantaged population from developing nations. Thus technology self-development is another important context in which self-development behaviors can be investigated. For example, developing the skills to use cell phones has the potential to transform the lives of poor women. This type of self-development has social and economic benefits for the women. These benefits occur in the form of social networking, ability to contact friends and family, developing professional alliances for business purposes, eliminating the barrier of distance for communicating with clients, overcoming time and distance constraints for gathering emotional support. But in this type of a setting (e.g. outside of the organization), different factors may affect decisions to engage in self-development behaviors. For instance, factors such as age, computer self-efficacy, technology affordability, social norms, family support, and purpose of technology use could each play an important role in shaping attitudes toward self-development behaviors.

Even within the organizational setting, other factors not investigated in this study could also affect self-development behaviors. For example, in the training motivation literature, predictors such as the mode and media of training, cognitive ability, anxiety, locus of control, career exploration and career planning have been used to predict training motivation (Colquitt et al., 2000). Future research could expand the current framework to incorporate factors such as these into the motivational aspects of self-development.

Further, since, self-development behaviors are a self-oriented concept, taking a look at self-development behaviors from a perceived beneficiary perspective could also have some very important implications and outcomes for employees and organizations. Such a perspective was identified in the theoretical model by Maurer, Shore and Pierce
(2002) but has not yet been tested empirically. Future research could be aimed at incorporating the perceived beneficiary perspective in the current model framework.

Another important aspect to consider for future research would be studying resources more in depth, by focusing on the effects of organizational culture on development activities. As mentioned above, an organizational culture that encourages and supports learning could be helpful in creating a learning environment. Given that organizational culture has been shown to affect employee attitudes and beliefs (Marcoulides & Heck, 1993), broadening the focus of perceived resources to also include the organization’s culture focus on the organization’s culture could enrich our understanding of self-development. For example, in a strong organizational culture where pursuing development activities are viewed as an integral part of behavioral norms, values, and beliefs, it is possible that employees would have higher levels of engagement in development activities.

Lastly, qualitative data gathered through interviews and open-ended questions would enrich our understanding of self-development behaviors. Qualitative data focusing employee motivations to engage in self-development behaviors would give valuable insights on identifying additional motives for engaging in self-development behaviors that might not be evident in data collected through survey questionnaires.
CHAPTER 6: CONCLUSION

In today’s global environment, ever changing market trends and technological advancements, investing time, resources, and energy into increasing the human capital of the firm has become indispensable. Hence organizations are continuously looking for mechanisms to motivate employees to voluntarily participate in development activities and to update their skills. Current research on these self-development behaviors has contributed to this quest by proposing and empirically examining several models of the factors affecting self-development behaviors. However, these models have focused on either only the social exchange lens or the motivational lens. By focusing on only a single lens, researchers are unable to account for the mutual influence of both social exchange and motivational factors affecting decisions to engage in self-development activities.

Based on prior literature on self-development behaviors and Theory of Planned Behavior (TPB), the current study developed a model that integrated the two major approaches to studying self-development behavior, the social exchange and motivational lenses. This integration has been lacking in research studies studying the phenomenon of self-development behaviors which have focused on only one lens – either the social exchange or the motivational lens. The results provide support for the argument that integrating these two approaches increases our understanding of self-development behaviors compared to the individual lenses as well as providing several implications for research and practice. The research provides practical recommendations for organizations and managers on ways to motivate and encourage employees to pursue self-development behaviors. To briefly summarize recommendations based upon the
research findings, organizations that wish to maximize the likelihood that employees will engage in self-development activities should:

a) create an environment in which manager decisions are viewed as fair
b) create an environment in which self-development behaviors are viewed as valuable and encouraged by influencing employees’ beliefs regarding the significance of self-development behaviors
c) increase self-efficacy of employees to pursue development activities
d) better understand the significance of personality traits such as need for achievement or conscientiousness and their potential role in employee attitudes toward self-development
e) provide the necessary resources for employees seeking self-development

To conclude, the current study contributes to our understanding of self-development behaviors by integrating research from multiple streams, providing a richer explanation for self-development behaviors. By focusing managers on the importance of these factors and how they affect self-development, it is likely that employees will feel more connected to the organization and have more positive attitudes that can in turn improve participation in development activities. Although the current research makes a strong contribution to our understanding of self-development, the factors affecting self-development behaviors by employees, additional research is needed to help organizations fully understand how they can motivate employees to pursue self-development activities.
References


APPENDICES

APPENDIX A

Approval Letter

To Whom It May Concern:

As the capstone of their graduate program, MBA students at the University at Albany are conducting a research project entitled, "Understanding Organizational Behavior". The goal of the project is to identify organizational factors, especially leadership, that have a positive impact on individuals and work group performance.

To gather data we have developed a questionnaire that we would like to administer in your organization. The questionnaire asks leaders to describe their leadership style and to rate the effectiveness of their subordinates. A separate questionnaire asks subordinates questions about the kind of supervision they receive, as well as questions about their work satisfaction, their level of organizational commitment, and so on.

The questionnaires are routine and have been validated in over 100 other organizations. The questionnaires for leaders or for subordinates generally take about 20-25 minutes to fill out and are felt to be interesting and non-threatening by leaders and
subordinates who have completed them previously. The subordinate questionnaire can be administered either in a paper and pencil format or as a web-based survey.

We maintain strict standards of confidentiality concerning individual respondents and participating organizations. Names of participating organizations are kept anonymous. Likewise, responses of individual leaders and subordinate respondents are kept confidential.

All MBA student are supervised by a University at Albany faculty member experienced in conducting questionnaire surveys in organizations. We hope your organization will be willing to participate. Other than your endorsement, no resources are needed from the sponsoring organizations. This project is approved by the University at Albany Office for Research Compliance. If you have questions about the project, please contact the Office of Research Compliance (518-437-4569; toll free 1-800-365-9139).

Please indicate your permission to conduct the survey in your organization by signing below.

_____________________________________________Your Name  __________________________Date

_____________________________________________Your Title  __________________________Organization
APPENDIX B

Survey Questionnaire

QUESTIONNAIRE ON LEADERSHIP

This questionnaire asks you to describe leadership in your work group. We are trying to learn about the things that leaders do to manage work groups effectively. Other questions ask about you, the work you do, your organization and opinions you have about working.

Your participation in this project is voluntary. There is no direct benefit to you, other than your contribution to research.

Your responses are very important and greatly appreciated.

This project is being conducted by MBA students under the direction of Dr. Thomas Taber (518-442-4937) of the School of Business at the State University of New York at Albany. If you have any questions about your rights as a participant in this study that have not been answered by the investigator, or if you wish to report any concerns about the study, you may contact the University at Albany Office of Research Compliance at 518-437-4569 (toll free 1-800-365-9139) or orc@uamail.albany.edu
INSTRUCTIONS

- Try to answer every question as honestly as you can. You do not have to answer a question if you prefer not to.

- The questionnaire has parts A through S. Please read carefully the instructions for each part.

INSTRUCTIONS WILL BE IN BOXES LIKE THIS

- The questionnaire does not deal with sensitive or embarrassing issues; nevertheless, we will maintain strict confidentiality of your responses. No one other than the researchers will see anyone's questionnaire. Your name will not be on the questionnaire, only an ID number. We use the ID number below to match your questionnaire with other data provided by supervisors. Supervisors have agreed to allow this research to be conducted in their units, but supervisors will not see your answers. Your individual information will be combined with that of hundreds of respondents from other Capital District organizations.

   ID: 11__ __ __ __

INFORMATION FROM THIS QUESTIONNAIRE IS USED STRICTLY FOR RESEARCH PURPOSES. ANSWERS ARE CONFIDENTIAL. NO ONE OTHER THAN THE RESEARCHERS WILL EVER SEE YOUR INDIVIDUAL ANSWERS.

- The questionnaire is fairly long, and takes from 20 to 30 minutes to fill out. We appreciate the time you are giving in helping with this research.

- When you have finished the questionnaire, please put it into the envelope and seal it shut.

THANK YOU FOR PARTICIPATING!
PART A: SUPERVISOR PRACTICES

This part of the questionnaire describes different types of managerial behavior. You are asked to describe how much your supervisor uses each type of behavior. Please be as careful and accurate as you can. Keep in mind that not all of the behaviors may be relevant for your situation.

Instructions: Select an appropriate response for each item and write the number on the line to the left of the item. The response choices are as follows:

5  To a Great extent
4  To a Considerable extent
3  To a Moderate extent
2  To a Limited extent
1  Not at all
0  Not Applicable

To what extent does your supervisor do each of the following behaviors

Clarifying Responsibilities
___  1. Explains work responsibilities and task assignments.
___  2. Explains what results are expected for a task or assignment.
___  3. Sets performance goals that are clear and specific.

Supporting
___  4. Shows concern for your needs and feelings.
___  5. Is sympathetic and supportive when you are worried or upset.
___  6. Provides encouragement and support when there is a difficult and stressful task.

Recognizing Effective Performance
___  7. Recognizes special contributions or important achievements.
___  8. Provides praise or recognition for effective performance.

Envisioning Change
___ 10. Describes a clear, appealing vision of new possibilities for the team or unit.
___ 11. Describes exciting new opportunities for the team or unit.
___ 12. Describes in an inspiring way what the unit could accomplish or become in the future.
Monitoring Operations
___ 13. Checks on the progress of the work to see if it is on target.
___ 14. Checks on the performance of unit members.
___ 15. Asks for a report on progress in carrying out a task or assignment.

Developing Skills
___ 16. Provides coaching to help you develop your skills and confidence.
___ 17. Helps you learn how to solve a difficult problem, rather than just telling you the solution.
___ 18. Provides opportunities to develop your skills.

Consulting
___ 19. Consults with you before making decisions that will affect you.
___ 20. Asks you for ideas and suggestions when making decisions about the work.
___ 21. Modifies a proposal or plan to incorporate your suggestions and deal with your concerns.

Empowering
___ 22. Encourages you to take responsibility for determining the best way to do your work.
___ 23. Trusts you to make an important decision without getting prior approval.
___ 24. Assigns an important task and lets you decide how to do it without interfering.

Leading by Example
___ 25. Leads by example (to demonstrate what type of behavior is appropriate and ethical.)
___ 26. Behaves in a way that is consistent with his/her espoused values.
___ 27. Sets an example of dedication, courage, and self-sacrifice in his/her own behavior.

Encouraging Innovative Thinking
___ 28. Asks people to look at a problem from a different perspective.
___ 29. Challenges people to re-examine traditional strategies and practices.
___ 30. Asks questions that encourage people to think about old problems in new ways.

Explaining the Need for Change
___ 31. Explains why changes are needed to deal with an emerging problem.
___ 32. Explains what a strategy, policy, or procedure is no longer appropriate.
___ 33. Explains why making changes now will avoid a more serious problem in the future.
34. Please rate the overall effectiveness of your supervisor by circling the number of the appropriate rating. (*Please circle one number*)

1-----------------2-----------------3-----------------4-----------------5
Poor           Fair         Good         Very Good        Excellent

PART B: YOUR RELATIONSHIP WITH YOUR SUPERVISOR

Think about your relationship with your supervisor. How strongly do you *agree or disagree* that statements 1 to 12 describe your relationship?

1-----------------2-----------------3-----------------4-----------------5-----------------6-----------------7
Disagree       Disagree       Disagree      Neutral        Agree          Agree          Agree
Strongly       Somewhat       Neutral       Agree          Agree          Agree          Strongly

*Please write a number on each blank line using the 7-point scale above.*

**Liking**

_____ 1. I like my supervisor very much as a person.

_____ 2. My supervisor is the kind of person one would like to have as a friend.

_____ 3. My supervisor is a lot of fun to work with.

**Loyalty**

_____ 4. My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.

_____ 5. My supervisor would come to my defense if I were ‘attacked’ by others.

_____ 6. My supervisor would defend me to others in the organization if I made an honest mistake.
Professional Respect

_____ 7. I am impressed with my supervisor’s knowledge of his/her job.

_____ 8. I respect my supervisor’s knowledge of and competence on the job.

_____ 9. I admire my supervisor’s professional skills.

Extra Effort

_____ 10. I do work for my supervisor that goes beyond what is specified in my job description.

_____ 11. I am willing to apply extra efforts, beyond those normally required, to meet my supervisor’s work goals.

_____ 12. I do not mind working my hardest for my supervisor.

13. The supervision I receive is the kind that …

(Please circle one number.)

1 ...greatly discourages me from giving extra effort
2 ...tends to discourage me from giving extra effort
3 ...has little influence on me
4 ...encourages me to give extra effort
5 ...greatly encourages me to give extra effort
PART C: MANAGING CHANGE

Supervisors sometimes need to respond to unexpected events and help the work-group manage changes. How well does your supervisor lead the group when change is needed?

Supervisor Effectiveness in Managing Change

1. Please rate the overall effectiveness of your supervisor as a manager of change.

(Please circle one number).

9  The most effective change manager I have known
8  Well above average, in the top 10%
7  Moderately above average, in the top 25%
6  A little above average, in the top 40%
5  About average in effectiveness
4  A little below average, in the bottom 40%
3  Moderately below average, in the bottom 25%
2  Well below average, in the bottom 10%
1  The least effective change manager I have known

2. Please rate how effective your supervisor is in managing change in your unit. Please circle the number of the appropriate rating. (Please circle one number)

1-------------2-------------3-------------4-------------5
Poor         Fair         Good         Very Good    Excellent
PART D: SUPERVISOR PRACTICES

Please rate the extent to which your supervisor uses each type of behavior described below.

1-------------------2-------------------3-------------------4-------------------5
To a  To a  To a  To a  To a
Very Small Limited Moderate Considerable Great
Extent   Extent   Extent   Extent   Extent

Please write a number on each blank line using the 5-point scale above.

    1. My supervisor holds departmental members to high ethical standards.
    2. My supervisor makes me feel like I work with him/her, not for him/her.
    3. My supervisor makes the personal development of department members a priority.
    4. My supervisor is sensitive to department members’ responsibilities outside the work place.
    5. My supervisor spends the time to form quality relationships with department members.
    6. My supervisor does what he/she promises to do.
    7. My supervisor works hard at finding ways to help others be the best they can be.
PART E: DESCRIBING YOUR JOB

Please indicate whether each statement below is an accurate or an inaccurate description of your job. Try to be as objective as you can.

1-----------------2------------------3---------------------4---------------------5
Very     Somewhat    Uncertain    Somewhat    Very
Inaccurate Inaccurate Accurate      Accurate

Please write a number on each blank line using the 5-point scale above.

Job Autonomy

_____ 1. The job denies me a chance to use my personal initiative or judgment in carrying out the work.

_____ 2. The job gives me considerable opportunity for independence and freedom in how I do the work.

_____ 3. I have almost complete responsibility for deciding how I will do my job.

Job Feedback

_____ 4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.

_____ 5. The job itself provides very few clues about whether or not I am performing well.

_____ 6. I work for long stretches without anyone letting me know how I am doing.
PART F: DEVELOPING YOUR JOB SKILLS AND KNOWLEDGE

The following items deal with opportunities and expectations for you to develop your job knowledge, skills and abilities at work. How strongly do you agree or disagree that the statements describe your attitudes?

1-2-3-4-5-6-7

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly</td>
<td>Somewhat</td>
<td>Somewhat</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Please write a number on each blank line using the 7-point scale above.

Attitudes About Developing New Job Skills

_____ 1. I like activities where I can develop job-related skills and knowledge.
_____ 2. I am excited by opportunities to learn skills at work.
_____ 3. I love to volunteer for projects and assignments that require learning new skills.
_____ 4. I like to spend time in learning new job-related skills.
_____ 5. My supervisor/boss thinks that it is valuable to learn new job-related skills.
_____ 6. My co-workers think that employees should spend time learning new job-related skills.
_____ 7. My supervisor/boss thinks that learning new job-related skills is a good idea.
_____ 8. My co-workers think highly of individuals who learn new job-related skills.

Resources for Skill Development

_____ 9. My organization provides time for employees to develop new job skills.
_____10. My organization provides resources to support employees who want to develop job skills.
_____11. My organization provides opportunities for employees to develop job skills.
PART G: ACTIVITIES YOU DO AT WORK

Listed below are activities that you might do at work. Probably no one does them all. Please estimate to what extent you do each behavior.

1-----------------2-----------------3-----------------4-----------------5
Not at All To a To a To a Almost
Limited Moderate Considerable Always
Extent Extent Extent

Please write a number on the blank lines using the 5-point scale above.

Help Co-workers

___ 1. Share work-related knowledge and information with co-workers.

___ 2. Explain a regulation or procedure to someone.

___ 3. Help others who have been absent.

___ 4. Willingly help others who have work-related problems.

Take Initiative

___ 5. Make innovative suggestions to improve the department.

___ 6. Volunteer for additional duties.

___ 7. Come up with new and original ideas for doing your job.

___ 8. Regularly come in earlier and/or leave later than required.

___ 9. Try to correct faulty procedures or practices.

___ 10. Try to adopt improved procedures for doing your job.

___ 11. Try to change how your job is executed in order to be more effective
Develop Job Skills

____ 12. Attend job-related training sessions, seminars or workshops.

____ 13. Participate in advanced training courses.

____ 14. Keep informed about the latest developments in your area of expertise.

____ 15. Learn new skills relevant to your job.

____ 16. Develop new levels of your existing skills in order to perform your job better.

____ 17. Volunteer for special assignments or projects that require learning new skills.

18. Please briefly explain why you engage in self-development activities at work.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
PART H: OPINIONS ABOUT YOUR ORGANIZATION & JOB

Below are things someone might say about their organization or job. How strongly do you agree or disagree that the statement describes your feelings?

1------------2-------------3------------4-----------5-------------6-------------7
Disagree  Disagree  Disagree  Neutral  Agree  Agree  Agree
Strongly  Disagree  Somewhat  Somewhat  Agree  Strongly

Please write a number on each blank line using the 7-point scale above.

Organizational Identity

___ 1. I talk up this organization to my friends as a great organization to work for.
___ 2. I find that my values and the organization's values are very similar.
___ 3. I am proud to tell others that I am part of this organization.
___ 4. This organization really inspires the very best in me in the way of job performance.
___ 5. I am extremely glad I chose this organization to work for over others I was considering at the time I joined.
___ 6. For me this is the best of all possible organizations for which to work.

Confidence and Skills

___ 7. When facing difficult tasks, I am certain that I will accomplish them.
___ 8. I believe I can succeed at almost any endeavor to which I set my mind
___ 9. I will be able to successfully overcome many challenges.
___ 10. Compared to most people, I can do most tasks very well.
___ 11. Even when things are tough, I can perform quite well.
Pay and Benefits

____ 12. Compared to other employees in *my* company with similar duties and responsibilities I feel that my pay is satisfactory.

____ 13. Compared to employees in *other* organizations with similar duties and my responsibilities I feel that my pay is satisfactory.

____ 14. I am satisfied with the fringe benefits offered by my company.

____ 15. I am satisfied with my total compensation (*pay plus fringe benefits.*)

16. Please rate the overall effectiveness of your supervisor. (*Circle one number below.*)

9  The most effective supervisor I have known
8  Well above average, in the top 10%
7  Moderately above average, in the top 25%
6  A little above average, in the top 40%
5  About average in effectiveness
4  A little below average, in the bottom 40%
3  Moderately below average, in the bottom 25%
2  Well below average, in the bottom 10%
1  The least effective supervisor I have known
Some organizations offer programs to assist employees in managing their personal lives. Are the three programs below offered for your work group?

Circle “No” or “Yes” or “?” (don’t know) to indicate if the three programs are available to you.

1. Flexible work arrangements (e.g., flexible work time, telecommuting/work-from-home option, compressed work week) . . . . No Yes ?

2. Paid leave of absence (e.g., parental leave, sabbatical) . . . . . . . . No Yes ?

3. Care support (e.g., on-site child care, subsidized child care, elder care support) .................................................. No Yes ?
### PART J: USING LIFE-WORK BALANCE PROGRAMS

How strongly do you agree or disagree that the statements below describe your feelings about using life-work balance programs?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
<tr>
<td>Strongly</td>
<td>Disagree</td>
<td>Somewhat</td>
<td>Neutral</td>
<td>Somewhat</td>
<td>Agree</td>
<td>Strongly</td>
</tr>
</tbody>
</table>

Please write a number on each blank line using the 7-point scale above.

_____ 1. The life-work balance programs described above are not relevant to me.

_____ 2. Participating in the life-work balance programs could lead to negative career consequences for me.

_____ 3. My supervisor does not support my participation in life-work balance programs.

_____ 4. By participating in one of the life-work balance programs, I would experience negative personal consequences.

_____ 5. The life-work programs are not feasible for my type of job.
The philosophy of my organization is that…

_____ 1. …work should be the primary priority in a person’s life.

_____ 2. …it is best to keep personal matters separate from work.

_____ 3. …offering employees flexibility in completing their work is a smart way of doing business

_____ 4. …attending to personal needs, such as taking time off for sick children or elderly parents, is frowned upon.

_____ 5. …individuals who take time off to attend to personal matters are not committed to their work.

_____ 6. …it is assumed that the most productive employees are those who put their work before their personal time.

_____ 7. …employees are given ample opportunity to perform both their job and their personal responsibilities well.
PART L: YOUR JOB SATISFACTION

This section asks how satisfied you feel with different aspects of your job.

*Please circle a number under the face that comes closest to your own feelings.*

1. Your overall satisfaction with the company.

   1   2   3   4   5   6   7

2. Your satisfaction with the supervision that you get on your job.

   1   2   3   4   5   6   7

3. Your satisfaction with the pay you are receiving.

   1   2   3   4   5   6   7

4. Your satisfaction with the work itself.

   1   2   3   4   5   6   7

5. Your satisfaction with your co-workers.

   1   2   3   4   5   6   7

6. Your satisfaction with your opportunities for promotion and advancement.

   1   2   3   4   5   6   7

7. Your ability to balance the needs of your job with those of your personal or family life.
PART M: HOW YOU ARE TREATED AT WORK

Please indicate how much you agree or disagree with each statement about how you are treated at work.

1-----------------2-----------------3-----------------4-----------------5-----------------6-----------------7
Disagree          Disagree          Disagree          Neutral          Agree          Agree          Agree
Strongly          Somewhat          Somewhat          Strongly

Please write a number on each blank line using the 7-point scale above.

Fairness

____ 1. I think that my level of pay is fair.
____ 2. Overall, the rewards I receive here are quite fair.
____ 3. My work schedule is fair.
____ 4. I consider my work load to be quite fair.
____ 5. I feel that my job responsibilities are fair.

Fair Procedures

____ 6. Job decisions are made by my supervisor in an unbiased manner.
____ 7. My supervisor makes sure that all employee concerns are heard before job decisions are made.
____ 8. My supervisor clarifies decisions and provides additional information when requested by employees.
____ 9. All job decisions are applied consistently across all affected employees.
____ 10. Employees are allowed to challenge or appeal job decisions made by my supervisor.
Decision Making

11. When decisions are made about my job, the supervisor treats me with respect and dignity.

12. When decisions are made about my job, the supervisor deals with me in a truthful manner.

13. When decisions are made about my job, the supervisor shows concern for my rights as an employee.

14. The supervisor explains very clearly any decisions made about my job.
PART N: PAY AND BENEFITS

Organizations differ in the various benefits they offer. Which of the following benefits are available to you at your organization?

Circle “No” or “Yes” or “?” (don’t know) to indicate if the benefit is available to you.

1. Do you receive overtime pay for working extra hours? . . . . . . . . . . . . . . . . . No  Yes  ?
2. Do you have the opportunity to earn a performance bonus?
   (e.g., profit sharing, a company or individual performance bonus) . . . No  Yes  ?
3. Salary Increases for years of service? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
4. Cash awards for your suggestions? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
5. Paid vacation? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
6. Paid sick days? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
7. Paid personal days . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
8. Health insurance – fully subsidized?
   (Your employer pays the entire premium.) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
9. Health insurance – partially subsidized?
   (Your employer and you both pay a share of the premium.) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
10. Dental insurance? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
11. Life insurance? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
12. Disability insurance? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
13. Educational reimbursement? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . No  Yes  ?
14. Company sponsored retirement plan (e.g., 401K or pension plans)? . . . . . . No  Yes  ?
### PART O: WORK EXPERIENCES

The following statements describe how you might feel at work. Please read each statement carefully and write the number that best describes how frequently you feel that way.

<table>
<thead>
<tr>
<th>Never</th>
<th>Almost never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

- A few times a year or less
- Once a month or less
- A few times a month
- Once a week
- A few times a week
- Everyday

___ 1. At my work, I feel bursting with energy.
___ 2. At my job, I feel strong and vigorous.
___ 3. I am enthusiastic about my job.
___ 4. My job inspires me.
___ 5. When I get up in the morning, I feel like going to work.
___ 6. I feel happy when I am working intensely.
___ 7. I am proud on the work that I do.
___ 8. I am immersed in my work.
___ 9. I get carried away when I’m working.
**PART P: YOUR OWN WORK PHILOSOPHY**

The statements below describe values you might have, regardless of what organization you were working for. Please rate how much you agree or disagree that the statement describes your values.

1 ------------ 2 ------------ 3 ------------ 4 ------------ 5 ------------ 6 ------------ 7

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree</th>
<th>Disagree Somewhat</th>
<th>Neutral</th>
<th>Agree Somewhat</th>
<th>Agree</th>
<th>Agree Strongly</th>
</tr>
</thead>
</table>

In any organization I might work for…

___ 1. …it would be more important for me to “Give to the organization.”

___ 2. …it would be more important for me to “Help others.”

___ 3. …the hard work I would do should “Benefit the organization.”

___ 4. …my personal philosophy in dealing with the organization would be “It is better for me to give than to receive.”

___ 5. …it would be more important for me to “Get from the organization.”

___ 6. …it would be more important for me to “Watch out for my own good.”

___ 7. …the hard work I would do should “Benefit me.”

___ 8. …my personal philosophy in dealing with the organization would be “If I don’t look out for myself, nobody else will.”

9. How likely is it that you will seek a new job with a different organization in the next year? *(Please circle one number)*

1 Not at all likely

2 Not very

3 Somewhat likely

4 Very likely

5 Certainly will
PART Q: YOUR WORK INTERESTS

Please indicate how much you agree or disagree with each statement about your possible work interests.

1---------------2---------------3---------------4---------------5---------------6---------------7

Disagree  Disagree  Disagree  Neutral  Agree  Agree  Agree
Strongly  Somewhat  Somewhat

Please write a number on each blank line using the 7-point scale above.

_____ 1. I try very hard to improve on my past performance at work.
_____ 2. I enjoy a difficult challenge.
_____ 3. I want to know how I am progressing as I complete tasks.
_____ 4. I enjoy setting and achieving realistic goals.
_____ 5. I enjoy the satisfaction of completing a difficult task.
PART R: DESCRIBING YOURSELF

Please indicate whether each statement below is an **accurate** or an **inaccurate** description of you. Please describe yourself as you are now, not as you wish to be in the future.

<table>
<thead>
<tr>
<th></th>
<th>Very Inaccurate</th>
<th>Somewhat Inaccurate</th>
<th>Uncertain</th>
<th>Somewhat Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>5</td>
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</tbody>
</table>

*Please write a number on each blank lines using the 5-point scale above.*

___ 1. I am always prepared.
___ 2. I pay attention to details.
___ 3. I often forget to put things back in their proper place.
___ 4. I get chores done right away.
___ 5. I like order.
___ 6. I make a mess of things.
___ 7. I leave my belongings around.
___ 8. I follow a schedule.
___ 9. I am exacting in my work.
___ 10. I shirk my duties.
1. What type of job do you have? (please check one)

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. 20 or less</td>
<td>2. 21 - 25</td>
<td>3. 26 - 30</td>
<td>4. 31 - 35</td>
<td>5. 36 - 40</td>
<td>6. 41 - 45</td>
<td>7. 46 - 55</td>
<td>8. 56 or more</td>
</tr>
</tbody>
</table>

2. What is your age? (please check one)

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<tr>
<th></th>
<th>1. 20 or less</th>
<th>2. 21 - 25</th>
<th>3. 26 - 30</th>
<th>4. 31 - 35</th>
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<th>6. 41 - 45</th>
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<td>6. 41 - 45</td>
<td>7. 46 - 55</td>
<td>8. 56 or more</td>
</tr>
</tbody>
</table>

3. How long have you been with your current employer? (please check one)

<table>
<thead>
<tr>
<th></th>
<th>2. less than 3 months</th>
<th>3. 3 months to less than 1 year</th>
<th>4. 1 year to less than 2 years</th>
<th>5. 2 years to less than 4 years</th>
<th>6. 4 years to less than 8 years</th>
<th>7. 8 or more years</th>
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<td>4. 1 year to less than 2 years</td>
<td>5. 2 years to less than 4 years</td>
<td>6. 4 years to less than 8 years</td>
<td>7. 8 or more years</td>
</tr>
</tbody>
</table>

4. How long have you been working present supervisor? (please check one)

<table>
<thead>
<tr>
<th></th>
<th>2. less than 3 months</th>
<th>3. 3 months to less than 1 year</th>
<th>4. 1 year to less than 2 years</th>
<th>5. 2 years to less than 4 years</th>
<th>6. 4 years to less than 8 years</th>
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<td>5. 2 years to less than 4 years</td>
<td>6. 4 years to less than 8 years</td>
<td>7. 8 or more years</td>
</tr>
</tbody>
</table>
5. How many more years do you anticipate working for your present employer?

   _____ 1. less than 1 more year
   _____ 2. 1 to 3 more years
   _____ 3. 3 to 5 more years
   _____ 4. 5 or more years

6. How much education have you completed? (please check one)

   _____ 1. Some high school, GED, or a high school diploma
   _____ 2. Some college education
   _____ 3. 2 year college degree
   _____ 4. 4 year undergraduate degree
   _____ 5. Masters degree
   _____ 6. Doctoral degree

7. What is your approximate annual salary before taxes? (please check one)

   _____ 1. up to $25,000
   _____ 2. $25,001 to $35,000
   _____ 3. $35,001 to $45,000
   _____ 4. $45,001 to $55,000
   _____ 5. $55,001 to $65,000
   _____ 6. $65,001 or more

8. Which plan listed below best describes your current pay plan? (Check only one)

   _____ 1. Salary only
   _____ 2. Hourly only
   _____ 3. Commission only
   _____ 4. Primarily salary or hourly plus a commission
   _____ 5. Primarily commission (plus a smaller base salary or hourly rate)
   _____ 6. None of the above

9. How many job-related training workshops have you attended in the past year on a voluntary basis?

   _____

   _____0  _____1  _____2  _____3  _____4  _____5  _____6  _____7 or more
10. Please write in your best estimate of the number of hours you spend in voluntary, job-related training activities each year . . . . . . . . . . . . _____ hours

11. About how many hours do you scheduled to work in a typical work week? _____ hours

12a. What is your marital status? *(married includes long term, committed, live-in relationships.)*

_____ 1. single  _____ 2. married/partner

12b. *(If you are single, please skip this question)* If you are married or have a partner, does your spouse/partner have a full-time job?  ____ 1. No  ____ 2. Yes

13a. Do you have direct responsibility as a primary care giver for any dependent children or adults?

_____ 1. No  ____ 2. Yes *(If "Yes," please answer the following questions.)*

_____ b. How many children up to age 6?

_____ c. How many children age 7 to 12?

_____ d. How many children age 13 to 18?

_____ e. How many adult dependents?

YOU'RE DONE!  THANK YOU!

Please seal your questionnaire in the envelope.