CONTEXTUAL AND DISPOSITIONAL ANTECEDENTS OF ORGANIZATIONAL CITIZENSHIP BEHAVIORS: DOES OCCUPATION MAKE A DIFFERENCE?

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Dissertation Abstract

Havva Pınar İmer, "Contextual and Dispositional Antecedents of Organizational Citizenship Behavior: Does Occupation Make a Difference?"

The present study aims to explain organizational citizenship behavior (OCB), specifically helping, civic virtue and sportsmanship behaviors within a framework of their antecedents. OCB is investigated in relation to its contextual antecedents of organizational and occupational commitments and perceptions of organizational and occupational support, together with dispositional affect and work values. The study also attempts to extend the literature with its focus on two occupations, engineering and teaching, to investigate if respondents representing two highly professional and distinct occupations display any differences in explaining OCB in relation to its antecedents.

The questionnaire was developed based on a literature review and administered to 180 teachers and 180 engineers working in private sector in Istanbul. Perceptions of occupation related support from the organization (OPOS) were measured by modifying four of the perceived organizational support items, the validation of which is detailed. Factor analyses suggested a five factor structure for work values named as involvement, prestige, accomplishment, social and material values and a two factor structure for negative affect (NA), internal NA (NA-I) and NA resulting from relations with others (NA-O).

As a result of the regression analyses, helping behavior is significantly explained with normative occupational commitment, perceptions of occupation related support from the organization, positive affect, involvement and social work values in a positive way, while with prestige work values in a negative way. Civic virtue behavior is predicted significantly by affective organizational commitment, perceptions of occupation related support from the organization, positive affect and involvement work values in a positive direction. Moderation analysis yielded a modest significance for the moderation of occupation between involvement work values and civic virtue behaviors. Sportsmanship behavior is explained with perceived organizational support and accomplishment work values in a positive way, while with NA-I and NA-O in a negative way. The results of the t-tests comparing the two occupational groups reveal differences between teachers and engineers for each variable but continuance occupational commitment, material work values and NA-O.

The findings of the study point to the importance of both context and dispositions in explaining OCBs. Occupation related support perceptions and work values, together with other contextual and dispositional antecedents, come out as powerful candidates in explaining organizational citizenship behaviors.

Tez Özeti

Havva Pınar İmer, "Kurumsal Vatandaşlık Davranışlarını Belirleyen Bağlamsal ve Kişisel Etmenler: Mesleklerin Etkisi"

Bu çalışma; yardımlaşma, sivil erdem ve centilmenlik alt boyutlarıyla incelenen kurumsal vatandaşlık davranışlarını belirleyen etmenleri bağlamsal ve kişisel olmak üzere iki grup etmenle açıklamayı hedeflemektedir. Bağlamsal etmenler arasında kuruma ve mesleğe bağlılık ile çalışanların kurumsal (genel ve meslekle ilgili) destek algıları; kişisel etmenler arasında ise iş değerleri ile olumlu ve olumsuz duygudurumları yer almaktadır. Çalışmanın bir amacı da kurumsal vatandaşlık davranışlarını belirleyen etmenlerin iki farklı profesyonel meslek grubunu temsil eden çalışanlar için farklı olup olmadığını araştırmaktır.

Yapılan literatür taraması sonucunda oluşturulan anket, İstanbul'da özel sektör çalışanı 180 öğretmen ve 180 mühendise uygulanmıştır. Çalışanların kurumdan meslekleri ile ilgili destek aldıklarına yönelik algıları, literatürdeki kurumsal destek algıları ölçeğinin dört ifadesinin değiştirilmesiyle elde edilmiş ve bu dört ifadenin geçerliliği ayrıntılandırılmıştır. Yapılan faktör analizleri sonucunda iş değerleri beş faktörle (katılım, prestij, başarma, sosyal ve materyal) açıklanırken, olumsuz duygudurumu için iki faktörlü (içsel ve sosyal) yapı ortaya çıkmıştır.

Regresyon analizleri sonucunda yardımlaşma davranışı mesleğe normatif bağlılık, çalışanların kurumdan meslekle ilgili destek aldıklarına yönelik algıları, olumlu duygudurumu, katılım, sosyal ve prestij (negatif) iş değerleri ile anlamlı bir biçimde açıklanmıştır. Sivil erdem davranışını anlamlı bir biçimde açıklayan etmenler arasında kuruma duygusal bağlılık, çalışanların kurumdan meslekle ilgili destek aldıklarına yönelik algıları, olumlu duygudurum ve katılım iş değerleri bulunmaktadır. Moderasyon analizleri, mesleğin, sivil erdem davranışı ve katılım iş değerleri arasındaki ilişkiyi anlamlı bir biçimde etkilediğini göstermektedir. Centilmenlik davranışı ise çalışanlarin kurumun desteği ile ilgili algıları ve başarma ile ilgili iş değerleriyle pozitif yönde, olumsuz duygudurum (içsel ve sosyal) ile negatif yönde anlamlı olarak açıklanmaktadır. İki meslek grubunu kıyaslamak için yapılan t-testleri sonucunda mühendis ve öğretmenlerin mesleğe zorunlu bağlılık, materyal iş değerleri ve sosyal olumsuz duygudurum dışındaki tüm değişkenler için farklılık gösterdikleri gözlenmiştir.

Çalışmanın bulguları, kurumsal vatandaşlık davranışlarını açıklamakta hem bağlamın hem de kişisel özelliklerin ve farklılıkların önemine işaret etmektedir. Çalışanların kurumdan mesleklerine yönelik aldıkları destek ile ilgili algıları ve iş değerleri, diğer değişkenler ile birlikte kurumsal vatandaşlık davranışlarını açıklamakta önemli rol oynamaktadır.

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To my beloved father, Atasev İmer, M. D.,

and my grandfathers

May all rest in peace…

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CHAPTER I

INTRODUCTION

Work behaviors, both in- and extra-role, have received much attention by the researchers in the past few decades. In-role behaviors included the ones formally required by the job, while extra-role behaviors are the ones that go beyond role requirements. In the competitive global economy, organizations benefit from employees who voluntarily engage in work behaviors that go beyond formal performance requirements and expectations. The acknowledgement of the importance of extra-role behavior in organizations can be traced back to Barnard (1938), who focused on the impact of "*willingness* of persons to contribute efforts to the cooperative system" (p.83, italics his) for workers. Katz and Kahn (1966) further explored the behavioral requirements necessary for organizational functioning as "innovative and spontaneous activity" that are directed toward achievement of organizational objectives, but also go beyond role requirements. Organ (1977) was the first to mention such behavior, later referred to as Organizational Citizenship Behavior (OCB).

Organ (1988) defined OCB as "behavior(s) of a discretionary nature that are not part of the employee's formal role requirements, but nevertheless promote the effective functioning of the organization" (p. 4). These behaviors are extra-role in the sense that they are not stated to be performed in employees' contracts with organizations. People generally do not exert uniform behaviors in their interactions with either fellow workers or the organization itself in work life. When employees perform extra-role behaviors that help co-workers, supervisors, and the organization to achieve results along with their expected in-role behaviors; organizations function

more effectively and overall performance is likely to get better (e.g. Podsakoff and MacKenzie, 1997; Borman and Motowidlo, 1993; George and Bettenhausen, 1990; Karambayya, 1989). People, on the other hand, might benefit from such behaviors through rewards from the organizations or improved quality of work life.

The structure and underpinnings of voluntary and discretionary workplace behaviors have received substantial amount of attention by researchers (for a review, see Organ, Podsakoff and MacKenzie, 2006). Most of the research has examined the relative contributions of job related or contextual attitudes like job satisfaction and dispositions of people, like personality and affect, to explain organizational citizenship behavior. Inspired by prior research, this study aims to explain OCB within the framework of its contextual and dispositional antecedents in a different cultural context from the former studies mostly conducted in Western cultures. OCB is investigated in relation to contextual and dispositional antecedents including contextual organization and occupation related variables, work related values and dispositional affect. In addition, this study attempts to extend the existing literature with its focus on two occupations, specifically engineering and teaching, to investigate if two highly professional and distinct occupational orientations display any differences in explaining OCB in relation to its antecedents. Moreover, in the unstable economic environment, it is possible that employees would shift their commitment toward their occupations rather than the organization as "single-organizational careers become more uncertain" (Snape, Lo, and Redman, 2008, p. 766). Thus, occupation related support perceptions of individuals are proposed as potential contextual antecedent affecting citizenship behaviors.

More specifically, the objectives of this research include:

- To explore the contributions of contextual and dispositional antecedents in explaining OCB
- To investigate if occupation related perceptions of support from the organization affect OCB
- To see if occupation accounts for any difference in the relations between citizenship behaviors and their antecedents

For this purpose, Chapter 2 offers a literature review of OCB and its types. In addition, a brief review of the proposed antecedents of OCB is provided. Chapter 3 presents the summaries for the related antecedents and theoretical framework of the study together with the hypotheses and research question to be tested. The subsequent chapter, Chapter 4 explains the methodology for the study covering the measures of the constructs used in the questionnaire, sample and procedures. The findings of the study in Chapter 5, portrays the reliability scores for the measures used in the study, factor analyses results, summary statistics of and correlations between the study variables, results of hypotheses testing, analyses for the research question and differences across the two occupations. Finally, a discussion of the results, conclusions, limitations for the study, implications and future research suggestions are provided in Chapter 6.

CHAPTER II

LITERATURE REVIEW

Organizational Citizenship Behavior (OCB)

Work behavior, not directly or explicitly recognized by the formal reward system, and that promotes the effective functioning of the organization (Organ, 1988, p. 4) has been of major interest to organizational behavior researchers. The term "organizational citizenship behavior" (OCB), describing such behavior, emerged as a result of the scholarly interest by Organ and his colleagues in the early 1980s (Bateman and Organ, 1983; Smith, Organ, and Near, 1983). The construct of OCB has its roots in Chester Barnard's concept (Barnard, 1938) of the "willingness to cooperate" and Katz and Kahn's (1966) distinction between dependable role performance and "innovative and spontaneous behaviors: performance beyond role requirements for accomplishments of organizational functions" (p. 337). According to Katz and Kahn, such category of behaviors encompassed cooperative activities with other members of the organization, individual trainings for additional contributions, actions that protect or improve the system and activities to present the organization as a positive climate in the external environment.

Organ (1988) defined OCB(s) as "behavior(s) of a discretionary nature that are not part of the employee's formal role requirements, but nevertheless promote the effective functioning of the organization" (p. 4). Further, similar domains of behaviors overlapping with that of OCB has been investigated and conceptualized as prosocial organizational behavior (Brief and Motowidlo, 1986; George, 1990, 1991;

George and Bettenhausen, 1990; O'Reilly and Chatman, 1986), organizational spontaneity (George and Brief, 1992; George and Jones, 1997), extra-role behavior (Van Dyne, Cummings, and McLean Parks, 1995) and contextual performance (Borman and Motowidlo, 1993, 1997; Borman, White, and Dorsey, 1995; Motowidlo and Van Scotter, 1994; Van Scotter and Motowidlo, 1996). OCB has been a widely researched construct in many domains of management including human resources management, industrial and labor relations, strategic management, international business, and leadership.

Citizenship behaviors cover a wide spectrum of work-related extra-role behaviors from altruistic ones to courtesy and cheerleading behaviors, thus, dimensionalization of OCB was a major focus for organizational behavior researchers. Different dimensions mostly overlapping with each other were offered by researchers during the discourse of the construct. The earliest dimensionalization for the construct was proposed by Smith et al. (1983), which is comprised of the two dimensions, *altruism* and *generalized compliance*. *Altruism* captured behavior directly intended to help a specific person in face-to-face situations such as helping others who have been absent, volunteering for things that are not required, orienting new people even though it is not required, helping others who have heavy workloads; and *generalized compliance* represented impersonal behaviors like compliance with norms defining a good worker (e.g. being punctual, not spending time in idle conversation). A few years later, Organ (1988) expanded the earlier classification of OCB to include five dimensions of *altruism* (narrower than the altruism of Smith et al., 1983), *conscientiousness* (a narrower form of generalized compliance), *sportsmanship* (e.g., not complaining about trivial matters), *courtesy* (e.g., consulting with others before taking action), and *civic virtue* (e.g., keeping up with matters that

affect the organization). Podsakoff and colleagues' (Podsakoff, Mackenzie, Moorman, and Fetter, 1990) operationalization of Organ's (1988) taxonomy of OCB dimensions has served as the basis for OCB measurement in a large number of empirical studies (e.g., MacKenzie, Podsakoff, and Fetter, 1991; Moorman, 1991; Moorman, Niehoff, and Organ, 1993; Niehoff and Moorman, 1993; Podsakoff and MacKenzie, 1994; Podsakoff, MacKenzie, and Bommer, 1996; Podsakoff, MacKenzie, and Fetter, 1993; Tansky, 1993).

Several other classifications of OCB-like behaviors have been proposed and operationalized in the literature (e.g., Borman and Motowidlo, 1993; Morrison, 1994; Van Dyne, Graham, and Dienesch, 1994). The behavioral domains covering these taxonomies often have common characteristics with one another and with Organ's (1988) five dimensions for OCB. Van Dyne et al. (1994) offered a four dimensional OCB framework in which the dimension of *social participation* shared common characteristics with altruism and courtesy; *loyalty* with sportsmanship and a bit of civic virtue, and *obedience* with civic virtue and conscientiousness. The final dimension, *functional participation*, did not overlap with any of Organ's (1988) dimensions, but was similar to Coleman and Borman's (2000) notion of job–task citizenship performance. In another study, Morrison (1994) came up with a different OCB structure with five dimensions. Her *altruism* dimension overlapped with Organ's (1988) altruism and courtesy dimensions, *conscientiousness* was a bit narrower than Organ's. She also presented *sportsmanship* and *involvement* dimensions, the latter of which had common features with Organ's sportsmanship and civic virtue dimensions. Her last dimension, *keeping up with changes*, overlapped with Organ's civic virtue and conscientiousness dimensions. Van Scotter and Motowidlo (1996) measured two dimensions of contextual performance:

interpersonal facilitation, which overlapped with Organ's (1988) altruism and courtesy dimensions, Morrison's (1994) altruism dimension, and Van Dyne et al.'s (1994) social participation dimension; and *job dedication*, which included elements of Organ's sportsmanship, civic virtue, and conscientiousness dimensions. In addition, job dedication included elements pertaining to persistence in completing one's own job or task. Recognizing that the behavioral elements of OCB overlap with each other (Coleman and Borman, 2000; Motowidlo, 2000; Organ, 1997), Williams and Anderson (1991), suggested that organizational citizenship behavior directed toward individuals (*OCBI*) was distinct from organizational citizenship behavior directed toward the organization (*OCBO*). Altruism and courtesy are behaviors that fit in OCBI, whereas sportsmanship, civic virtue, and conscientiousness fit in OCBO.

In a meta-analysis, Podsakoff and colleagues captured the dimensions of OCB retrieved from the literature as helping behavior, sportsmanship, organizational loyalty, organizational compliance, individual initiative, civic virtue, and self development (Podsakoff, MacKenzie, Paine, and Bachrach, 2000). Helping behavior has been identified as an important form of citizenship behavior by almost every researcher interested in this area (Borman and Motowidlo, 1993, 1997; George and Brief, 1992; George and Jones, 1997; Graham, 1989; Organ, 1988, 1990a, 1990b; Smith et al., 1983; Van Scotter and Motowidlo, 1996; Williams and Anderson, 1991). As a dimension of OCB, helping behavior involves voluntarily helping others with, or preventing the occurrence of work-related problems. Organ (1990b, p.96) has defined sportsmanship as "a willingness to tolerate the inevitable inconveniences and impositions of work without complaining". Organizational loyalty involves promoting the organization to outsiders, protecting and defending it against external

threats, and remaining committed to it under any condition. Organizational compliance covers a person's internalization and acceptance of the organization's rules, regulations, and procedures, which results in a conscientious adherence to them, even no one monitors compliance. Individual initiative includes voluntary acts of creativity and innovation designed to improve one's task or the organization's performance, persisting with extra enthusiasm and effort to accomplish one's job, volunteering to take on extra responsibilities, and encouraging others in the organization to do the same; sharing the idea that the employee is going beyond the call of duty. Civic virtue stands for a macro-level interest in the organization as a whole. Such behavior is shown by a willingness to participate actively in its governance (e.g., attend meetings, engage in policy debates, express one's opinion about what strategy the organization ought to follow, etc.); to monitor its environment for threats and opportunities (e.g., keep up with changes in the industry that might affect the organization); and to look out for its best interests (e.g., reporting fire hazards or suspicious activities, locking doors, etc.), even at personal cost. Finally, self-development includes voluntary behaviors employees engage in to improve their knowledge, skills, and abilities.

In order to explain the reasons for the differences of voluntary extra-role behaviors among individuals, researchers have investigated the antecedents of citizenship behaviors. Most research has focused on employee attitudes, especially job satisfaction (Bateman and Organ, 1983; Lee and Allen, 2002), and dispositional characteristics of the individuals, especially affect (George, 1990) and personality (Konovsky and Organ, 1993), as important antecedents of OCB.

Podsakoff et al. (2000) categorized the antecedents of OCB under four headings: individual (or employee) characteristics, task characteristics,

organizational characteristics, and leadership behaviors. The initial research in the area of OCB (Bateman and Organ, 1983; Organ, 1988; Smith et al., 1983) concentrated mainly on employee attitudes, dispositions, and leader supportiveness. Job-related employee attitudes, including job satisfaction and organizational commitment also had significant correlations with dimensions of OCB (Bateman and Organ, 1983; LePine, Erez, and Johnson, 2002; Motowidlo, 1984; Organ and Konovsky, 1989; Organ and Ryan, 1995).

Providing a thorough review of literature on the antecedents of OCB is beyond the scope of this study. Rather, the aim is to investigate the contextual and dispositional antecedents of OCB with a specific focus on occupation related constructs and the occupation itself to explore if it makes a difference in the experience of citizenship behaviors. Contextual antecedents include context or organization and occupation related commitments and perceptions of support from the organization, with additional emphasis on occupation related support perceptions of working individuals from two professional occupations of teaching and engineering. Dispositional antecedents consist of work values and personality related positive and negative affect.

Antecedents of OCB

Organizational Commitment

Since 1970s, the concept of commitment in the workplace has been attracting the attention of academicians and practitioners. Many definitions of commitment has been made through its history, but the most common ones explain it as an attitude

that reflects feelings such as attachment, identification with or loyalty to the object of commitment (Morrow, 1993). Commitment as a concept was first proposed as an alternative explanation to replace or strengthen other explanations that produced somewhat unsatisfactory findings concerning the effects of job satisfaction on work behaviors such as turnover and absenteeism (Mowday, Porter, and Steers, 1982). Lack of commitment has been offered as an explanation for employee absenteeism, turnover, theft, and job dissatisfaction (Morrow, 1993).

Researchers have studied alternative ways to understand commitment and to locate its contribution in both theory and practice. One of these important alternative approaches was to characterize commitment as a multidimensional concept. Allen and Meyer (1990) stated that different conceptualizations of commitment as an attitude have their bases in three general themes of affective attachment, in which commitment is considered an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in the organization; perceived costs, in which commitment is viewed as a tendency to "engage in consistent lines of activity" (Becker, 1960, p. 33) based on the individual's recognition of the "costs" (or lost side-bets) associated with discontinuing the activity (Becker, 1960; Farrell and Rusbult, 1981); and obligation, in which commitment is taken as a belief about one's responsibility to the organization (Meyer and Allen, 1987).

In line with these general themes, Meyer and Allen (1987) came up with three components of attitudinal commitment labeled as *affective*, *continuance* and *normative* commitments, respectively. The link between the components of commitment and the general themes in such a conceptualization was the relationship between employee and organization that decreases the likelihood of turnover (Allen

and Meyer, 1990). Employees with strong affective commitment tend to remain with the organization because they *want* to, those with strong continuance commitment because they *need to,* and those with strong normative commitment because they feel they *ought* to do so. The possibility of employees' experience of such psychological states to varying degrees led to the conception that affective, continuance and normative commitment are viewed as distinguishable *components,* rather than *types,* of attitudinal commitment. Some employees, for example, might feel both a strong need and a strong obligation to remain, but no desire to do so; others might feel neither a need nor obligation but a strong desire, and so on. Therefore, the "net sum" of a person's commitment to the organization reflects each of these distinguishable psychological states.

Allen and Meyer (1990) suggest that each of the three components of commitment developed somewhat independently of the others as a function of different antecedents. The antecedents of affective attachment to the organization fell into four categories: personal characteristics, job characteristics, work experiences and structural characteristics (Mowday et al*.,* 1982). Meyer and Allen (1987) pointed out that the strongest evidence has been provided for work experience antecedents, especially the ones that fulfill employees' psychological needs to feel comfortable within the organization and competent in the work-role. It is also stated that the continuance component of organizational commitment will also develop on the basis of two factors: the magnitude and/or number of investments (or side-bets) individuals make and a perceived lack of alternatives. The theoretical work of Becker (1960) suggests that individuals made side-bets when they take an action that increases the costs associated with terminating another related action. When employees who invest considerable time and energy specializing in a job skill that cannot be transferred

easily to other organizations, they are in fact “betting” that the time and energy invested will pay off. Winning the bet requires continued employment in the organization. According to Becker (1960), the likelihood that employees will stay with the organization will be positively related to the magnitude and number of side-bets they recognize. Similar to investments, the lack of employment alternatives also increases the perceived costs associated with leaving the organization (Farrell and Rusbult, 1981; Rusbult and Farrell, 1983). Therefore, the fewer viable alternatives employees believe are available; the stronger will be their continuance commitment to their current employer. Finally, it is mentioned that the normative component of organizational commitment would be influenced by the individual's experiences both prior to (familial/cultural socialization) and following (organizational socialization) entry into the organization (Wiener, 1982). With respect to prior entry, for example, an employee would have strong normative commitment to the organization if significant others (e.g. parents) have been long-term employees of an organization and/or have stressed the importance of organizational loyalty. With respect to organizational socialization, it is stated that those employees who have been led to believe, through various organizational practices, that the organization expects their loyalty would be most likely to have strong normative commitment to it.

Organizational commitment is seen as an important antecedent of organizational citizenship behavior (e.g. Brief and Motowidlo, 1986; O'Reilly and Chatman, 1986, Organ and Ryan, 1995; Podsakoff et al., 2000). A central theme of commitment research is the idea of the individual's psychological attachment to an organization, the psychological bond linking the individual and the organization. Buchanan (1974, p. 533) described commitment as “a partisan, affective attachment to the goals and values of an organization, to one's role in relation to the goals and

values, and to the organization for its own sake, apart from its purely instrumental worth". Other researchers have also made a similar point and differentiated a type of attachment based on calculative involvement or an exchange of behavior for specific extrinsic rewards from a moral attachment where involvement is predicated on a congruence of values (Becker, 1960; Etzioni, 1961; Gould, 1979; Hall, Schneider, and Nygren, 1970; Kidron, 1978; Meyer and Allen, 1984). The importance of having organizational members with strong psychological attachment to the organization has been focused in studies of prosocial, citizenship and/or extra-role behavior (e.g. Katz, 1964; O'Reilly and Chatman, 1986; Meyer and Allen, 1991). Employees with strong psychological attachment or high commitment to the organization are supposed to be motivated to contribute meaningfully to the organization than less committed employees (Lee, 2001). Meyer and Allen (1991) argued that affectively committed employees direct their attention to aspects of their work performance that are believed to be valuable to the organization.

Occupational Commitment

Research on commitment recognizes the importance of occupational commitment as a distinct focus, along with other focuses or targets such as organization, supervisor, team and customer (Meyer, Becker, and Vandenberghe 2004; Meyer, Stanley, Herscovitch, and Topolnytsky, 2002). As employer-employee relationships become less stable and organizations continue to restructure, it is probable for some employees to shift their loyalty to a broader base like their occupation (Snape and Redman, 2003).

Occupational commitment has been defined as the "psychological link between an individual and his/her occupation that is based on an affective reaction to that occupation" (Lee, Carswell, and Allen, 2000, p. 800). Someone with higher occupational commitment strongly identifies with and has positive feelings about his/her occupation (Blau, 1985).

Meyer and colleagues (1993) have presented empirical evidence for a three-dimensional (namely; *affective*, *continuance* and *normative*) view of occupational commitment based on their three-dimensional structure for organizational commitment (Meyer, Allen, and Smith, 1993). When these dimensions are applied to occupational commitment, affective commitment is a person's emotional attachment to his/her occupation; normative commitment is a person's sense of obligation to remain in his/her occupation; while continuance commitment involves the individual's assessment of the costs associated with leaving one's occupation. Meyer et al. (1993) found these three dimensions of occupational commitment to be distinguishable using confirmatory factor analyses on samples of student nurses and registered nurses.

While all three forms of commitment might be related to an individual's likelihood of remaining in an occupation, the nature of the person's involvement in that occupation might be quite different depending on which form of commitment is predominant. A person who is affectively committed to an occupation (i.e., has a strong desire to remain in the occupation) might be more likely to join and participate in relevant associations or activities than someone who is not so attached to keep up with developments in the occupation (e.g., by subscribing to trade journals or attending conferences). The same might be true of individuals who have a strong normative commitment (i.e., a sense of obligation to remain). In contrast,

individuals who have a strong continuance commitment (i.e., who recognize high costs associated with leaving the occupation) might be less inclined to be involved in occupational activities besides those required to continue membership than those who remain for other reasons. Similar to the case in continuance organizational commitment, continuance commitment to the occupation might be expected to correlate negatively with the tendency to engage in behaviors that are beneficial from the standpoint of the occupation or profession (e.g., promotion of the occupation to the public or compliance with professional standards). In an empirical study among U.K. National Health Service nurses, Lee (2001) found prosocial organizational behavior of helping to be significantly explained by occupational commitment.

Perceived Organizational Support (POS)

Perceived organizational support (POS) is used in the literature to explain the employee-organization exchange, in terms of the development of employee commitment to an organization (Eisenberger, Huntington, Hutchison, and Sowa, 1986). Eisenberger and colleagues (1986) stated that "employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being" (p. 501), and referred to those global beliefs as perceived organizational support. These researchers claimed POS to be related with the overall quality of the exchange relationship between the employee and his/her organization and based on the idea that employees tend to personify the organization in terms of organizational actions, traditions and policies (Levinson, 1965; Fuller, Hester, Barnett, Frey and Relyea, 2006). POS develops when the employees interpret the organizational actions, traditions and policies in a positive way.

Within a social exchange framework, employees infer that their organizations are committed to them, referred to as POS, and in return, they are committed to their organizations. POS can take the form of high and low levels, where high levels of POS not only create employees' feelings of commitment to their employers, but make the employees feel more obligations towards reciprocating their employers' commitment to them (Wayne, Shore and Liden, 1997). Since POS is an exchange relationship, employees look for balance in their relationships with their organizations implying that they are inclined to govern attitudes and behavior in proportion to the degree of employers' commitment to them as individuals in tangible; e.g. promotions, increases in salary; or intangible ways; e.g. recognition, mentoring, personal development tools.

Research has shown that employee perceptions of organizational support are related to employee attendance, performance, commitment, and citizenship behavior at the organizational level (Eisenberger, Fasolo, and Davis-LaMastro, 1990; Eisenberger, et al., 1986; Settoon, Bennett, and Liden, 1996). In addition, research has also shown that POS is positively related to conscientiousness in performing job responsibilities and to commitment and innovation (Eisenberger, et al., 1990).

Social exchange theory predicts that perceived organizational support would contribute to performance and organizational citizenship behavior (OCB) because of the utility these behaviors provide for organizations (Wayne et al., 1997). Employees who feel that they have been well supported by their organizations tend to reciprocate by performing better and engaging more readily in citizenship behavior than those reporting lower levels of POS (Eisenberger et al., 1990; Gouldner, 1960; Shore and Wayne, 1993). POS is also shown to be related to affective commitment and intentions to quit. Eisenberger and colleagues (1986) argued that employees

become affectively committed to their organizations because of perceptions that the organizations are committed to them (POS), and several empirical studies have supported the strong relationship between POS and affective commitment (Eisenberger et al., 1990; Shore and Tetrick, 1991; Shore and Wayne, 1993). Similarly, for intentions to quit, an employee who views an employer as low in support would be more likely to seek employment elsewhere (Guzzo, Noonan, and Elron, 1994).

It is important to distinguish POS from other constructs (Shore and Tetrick, 1991). Earlier researches have demonstrated that POS is distinct from perceived supervisor support (Kottke and Sharafinski, 1988), organizational politics (Randall, Cropanzano, Bormann, and Birjulin, 1999), and organizational commitment (Shore and Tetrick, 1991). Once POS is based on the particular work history of an employee and his/her perceptions of the employer's level of commitment, it could also be stated that POS is a conceptually different construct from organizational climate, which reflects individuals' interpretations of a work environment they share with others (Kopelman, Brief, and Guzzo, 1990); even though they both concern work environment issues (Wayne et al., 1997).

Work Values

A major goal of research on values has been to explore the ways in which individuals' value priorities are related to their attitudes, behaviors, social experiences and roles. One branch of this research has focused primarily on work values (e.g. Elizur, 1984; Super, 1980). Any study of values or work values requires a clear conceptualization. The meaning of values and work values, the similarity

between them and related concepts has been the subject of substantial considerations in the literature. Researchers usually consider values as affecting behavior (Elizur, Borg, Hunt, and Beck, 1991).

Values are considered as normative standards to judge and choose among alternative modes of behavior (Becker and McClintock, 1967; Kluckhohn, 1952). Most researchers agree on the conceptualization of values as being standards for choosing goals or guiding actions and being relatively stable over time (England, 1967; Meglino, Ravlin, and Adkins, 1989; Rokeach, 1973). Culture, society and personality are proposed to be evaluated as the references affecting the development of values, which occupy a central position in the cognitive system, one's personality and determine attitudes (Dose, 1997). Allport, Vernon and Lindsey (1951) consider values as basic interests or motives and evaluative attitudes. French and Kahn (1962) describe both needs and values as being able to motivate goal directed behavior in the person by inducing valence on certain environmental objects, behavior, or states of affair. Values act as a basic component in cognitive theories of motivation (Porter and Lawler, 1968; Vroom, 1964). The different work goals are ordered by their importance as guiding principles for evaluating work outcomes and settings and for choosing among different work alternatives.

Some authors suggest a distinction between values and attitudes (Rokeach, 1973), whereas Guttman (1982) considers values a subset of attitudes with a special emphasis on the concept of importance. Values are more generalized in nature than attitudes. Attitudes pertain to people's beliefs about specific objects or situations (Hollander, 1971), and could be considered as being placed in lower levels in one's hierarchy of beliefs (Rokeach, 1973). In addition, while attitudes can take the form of positive and negative, values are always positive (Roe and Ester, 1999).

Work values are beliefs pertaining to desirable end-states (e.g. high pay) or behaviors (e.g. working with people) (Ros, Schwartz and Surkiss, 1999), and are important elements in an individual's frame of reference (Pennings, 1970). Elizur and colleagues (1991) propose that "value" of a given social group is any entity (object, behavior or situation) on which that group places a high worth or importance and state work values to be such entities in the work context. Despite the presence of different labels, most area researchers appear to classify work values in the same two, intrinsic and extrinsic; or three types: (1) intrinsic or self-actualization values, (2) extrinsic or material values, (3) social or relational values (e.g. Alderfer, 1972; Borg, 1990; Crites, 1961; Mottaz, 1985; Pryor, 1987; Elizur et al., 1991).

To understand the structure of work values, Elizur (1984) arrived at a trichotomous classification of work values, which largely shares the content of extrinsic, intrinsic, and social aspects of work values. Using facet analysis (Elizur, 1984; Elizur and Guttman, 1976; Guttman, 1959), Elizur et al. (1991) defined and tested two basic facets of work values domain in order to analyze the domain systematically using data from eight different countries. First facet specified the modality of the outcome (instrumental, affective, or cognitive). Instrumental outcomes (e.g. pay, benefits) referred to the ones that are concrete or of practical use; affective outcomes emphasized relations with associates, and cognitive outcomes (e.g. interest, achievement) referred to outcomes internal in nature. These modalities largely overlap with the earlier made distinction between extrinsic, social and intrinsic orientation of work values respectively. The second facet, system performance contingency, classifies outcomes in terms of rewards and resources. Rewards pertain to the work values that are contingent on performance (e.g. job

status) and resources refer to the values obtained by being located in the system (e.g. work conditions). The second facet is beyond the focus of this study.

Such conceptual structure of work values subsumes many of the earlier distinctions made (Elizur et al., 1991). For example, the dual intrinsic-extrinsic distinction may be considered to be covered by the modality facet. Intrinsic outcomes are cognitive, whereas extrinsic outcomes are either instrumental or affective. The modality facet, with its three elements, seems to provide a more detailed and generalizable classification than does the intrinsic-extrinsic dichotomy.

The studies on work values mostly focused on construct definition and dimensionalization and a few studies investigated the relations of work values with work attitudes like organizational commitment (Elizur and Koslowsky, 2001) and job satisfaction (Blood, 1969; Vansteenkiste, Neyrinck, Niemiec, Soenens, B., De Witte, Van den Broeck, 2007) and found positive relationships with work attitudes. The focus in this study is to explore their relationships with citizenship behaviors that are voluntary in nature.

Affect

Affect has been investigated in the literature in two forms, dispositional and situational. The situational affect as a *state* is evaluated with emotions and mood for a rather short and specified period of time; while dispositional affect as a *trait*, reflects more long-term and durable feelings, as part of one's personality in general (Watson, Clark, and Tellegen, 1988). Although states may sometimes seem more appropriate to predict situation related attitudes or behavior, traits are accepted as the precursors of states as dispositional antecedents of attitudes and/or behavior (e.g.

George, 1991; 1992). To understand where the affective states come from, personality traits become a major concern (George, 1992).

Dispositional affect consists of two independent dimensions rather than being opposites, positive and negative affect (Watson et al., 1988). Individuals high on the trait positive affect have an overall sense of well-being and evaluate themselves as being active, enthusiastic and tend to hold a positive outlook; while being able to experience positive affective states over time and across situations (George, 1992). Individuals who are low on positive affect tend to hold a weaker sense of well-being and have lower self-efficacy. People high on negative affect are more likely to hold a negative outlook and experience negative states over time and across situations. They are more prone to hold aversive feelings like anger, guilt and fear. Individuals who are low on negative affect tend not to hold a negative outlook and are less likely to experience negative states (George, 1992; Watson et al., 1988). Watson and colleagues (1988) operationalized both constructs to measure affect as a state and as a trait with Positive and Negative Affect Schedule (PANAS).

Affect, both as state and trait has been of major concern in explaining attitudes and behaviors. Positive and negative affect have been investigated in relation to attitudinal variables such as job satisfaction, organizational commitment, intent to quit, job related burnout, turnover intentions (e.g. Brief and Weiss, 2002; Cropanzano, James and Konovsky, 1993; George, 1992). George and Brief (1992) and Spector and Fox (2002) investigated the role of affect as state on organizational spontaneity and voluntary behaviors. Mood related or emotional responses predicted citizenship behaviors due to their ability in determining action tendencies (Ilies, Scott and Judge, 2006).

Although research has proposed that personality characteristics in terms of affective traits are influential in performing citizenship behaviors (Borman, Penner, Allen, and Motowidlo, 2001; Organ and Ryan, 1995), mixed findings exist when affect is considered as a trait vs. as a state (e.g., George, 1991; Nikolaou and Roberston, 2001; Organ and Konovsky, 1989; Smith et al., 1983). Organ and Konovsky (1989) examined the effect of the personality trait of positive affect on OCB and found that positive affect did not add to the variance in OCB when studied simultaneously with cognition. On the other hand, George (1991) tested the relationship between mood trait (such as PA), mood state, and OCB and found that when measured separately, mood state was related to OCB.

CHAPTER III

THEORETICAL FRAMEWORK AND HYPOTHESES

As summarized in the previous chapter, Organ (1988, 1990a, 1990b) identified conceptually distinct dimensions of OCB, including altruism, courtesy, cheerleading, peacekeeping, sportsmanship, civic virtue, and conscientiousness. Empirical research (e.g., Podsakoff and MacKenzie, 1994; MacKenzie et al., 1991) indicates that managers often have difficulty in recognizing some of these fine distinctions and tend to think of altruism, courtesy, cheerleading, and peacekeeping in a single helping behavior dimension. Conceptually, helping behavior is a second-order latent construct, consisting of Organ's (1988, 1990a, 1990b) altruism, courtesy, peacekeeping, and some aspects of his cheerleading dimensions (Podsakoff, Ahearne and MacKenzie, 1997). The first three of these dimensions involve helping behaviors or preventing the occurrence of work-related problems. It is also possible to consider cheerleading as helping behavior since it involves encouraging a coworker who is discouraged about his or her accomplishments or professional development. Thus, all four of these forms of citizenship behaviors relate to aspects of helping behavior. According to Organ (1988), sportsmanship is a willingness on the part of an employee to tolerate less than ideal circumstances without complaining, civic virtue is the behavior indicating that an employee responsibly participates in, and is concerned about, the life of the company. The focus of the present study is to investigate the antecedents of three citizenship behavior dimensions: helping, civic virtue and sportsmanship.

OCB has been investigated with respect to its cognitive, affect related and/or dispositional antecedents in the literature (e.g. Organ and Konovsky, 1989; Williams and Anderson, 1991; Konovsky and Organ, 1996; Messer and White, 2006). The distinction between cognition and affect at work in explaining citizenship behaviors is focused in the research of Organ and Near (1985). The authors referred to work related cognitions as employees' judgments or evaluations about various aspects of the work situation. Attitudes stand for favorable or unfavorable evaluations of specific objects, people, or events and involve both cognitive or calculative and affective components in nature. Since it is difficult to partition the cognitive and affective components of such attitudes, they will be treated as contextual constructs as determinants of OCBs, where "context" refers to their nature as being work related. Affect at work represents "not so much the cool appraisal of what is out there but what the individual feels [at work], in terms of hedonic tones" (Organ and Near, 1985, p. 243). Although affect and cognition are not independent constructs, they are assumed to be different enough to show a differential pattern of relations with other variables (Abelson, Kinder, Peters, and Fiske, 1982). Dispositions or traits are rather enduring characteristics of individuals and have differing relationships with OCB (Organ and Ryan, 1995; LePine et al., 2002).

Positive work attitudes such as organizational commitment and job satisfaction have been claimed to be among major determinants of citizenship behaviors by employees (e.g. O'Reilly and Chatman, 1986; Organ and Ryan, 1995). The importance of positive work attitudes in relation to various aspects of outcomes such as individual-level job performance (e.g. Meyer and Allen, 1997), employee absenteeism and turnover have been stated in earlier research (e.g. Price and Mueller, 1986). Organ (1988) proposed that a positive relationship existed between work

attitudes as context related variables and prosocial or citizenship behaviors, the basis of which lies in the voluntary and discretionary characteristic of such behaviors.

Organ (1994) also pointed to the possibility of a basis for believing that employee disposition accounts for the relationship between employee attitudes and OCBs. Although empirical research on the unique contributions of attitudes in comparison to dispositions as OCB predictors did not support Organ's (1994) belief (e.g., Konovsky and Organ, 1996; Organ and Lingl, 1995), Organ and Ryan (1995, p.795) cautioned, "Only a limited set of dispositional variables have been examined, and the extent of research on disposition and OCB has not been as extensive as that on attitudes". Among dispositional variables, the most investigated constructs as OCB antecedents are the personality traits of agreeableness and conscientiousness, positive and negative affectivity (Podsakoff et al., 2000).

Earlier studies (e.g. Konovsky and Organ, 1996; Organ and Lingl, 1995) have focused on the importance of dispositional personality characteristics mostly in relation to two of the "Big Five" (McCrae and Costa, 1987) dimensions, conscientiousness and agreeableness, and found no support for it. In a further research, Konovsky and Organ (1996) found the trait of conscientiousness to be a predictor of OCB in a study conducted with administrative and professional employees of a hospital, whereas the trait of agreeableness did not emerge as a predictor. On the other hand, a laboratory experiment by Comeau and Griffith (2005) pointed out agreeableness as a predictor of OCB, while conscientiousness was not found to have such an effect. Another dispositional component, the trait of positive affect (PA) has also yielded ambiguous findings in its relation to OCB. While PA did not appear as a predictor of OCB in Organ and Konovsky's (1989) research, it has

come out as playing a role in providing emotional help to others in the workplace in another study conducted in a recruitment firm (Toegel, Anand, and Kilduff, 2007).

Values, especially work values, as beliefs pertaining to desirable end-states, has received little attention in explaining citizenship behaviors. They are considered as basic interests or motives (Allport et al., 1951), and counted as a basic component of cognitive motivation theories (Vroom, 1964). While some researchers distinguish values and attitudes (Rokeach, 1973), some think of values as a subset of attitudes with emphasis on importance evaluations (Guttman, 1982). One distinction between values and attitudes is values are more generalized in nature (Roe and Ester, 1999) than attitudes, which are rather context related. In addition, Roe and Ester (1999) suggest that attitudes take the form of being either positive or negative, while values are always positive. In this study work values, as rather enduring beliefs about desirable end-states, are treated as potential dispositional antecedents of OCB through their motivational impact on behavior.

Within the OCB literature, consensus has not been reached on the contribution of context and disposition, though both are recognized as being influential for explaining the variance in OCBs. Thus, one purpose of this study is to explore the relative significance of contextual and dispositional variables as possible antecedents of OCBs, when considered simultaneously. Specifically, the purpose is to investigate organizational and occupational commitments and perceived organizational support with a focus on occupation as contextual, work values and affect as the dispositional predictors in explaining OCBs.

The study has the room to make several contributions. First, the findings will add to the literature for explaining the relative effects of contextual and dispositional antecedents of OCB, since such variables are explored simultaneously, different from

earlier research. Second, the inclusion of work values in the study as a potential antecedent will also extend the research on OCB. Third, perceptions of occupation related support from the organization is investigated as a potential contextual antecedent for explaining OCBs, and a measure for such perceptions is derived from the literature. Fourth, the proposed framework is explored in a different context than Western culture, with its focus on two different occupations in nature, which could enable one to test for the generalizibility of the findings across cultures and occupations in the existing literature.

The proposed relationships for the above mentioned contextual and dispositional antecedents and OCBs to be tested are detailed in the following sections.

OCB and Contextual Antecedents

To explain the relationship between organizational commitment and prosocial or citizenship behaviors, Lee (2001) offers two mechanisms: identification (social identity theory) and social exchange (social exchange theory). Social identity theory (SIT), developed by Tajfel and Turner (1985), suggests a social psychological perspective to understand the antecedents and consequences of social identification in organizations. According to SIT, people tend to classify themselves and others into various social categories, such as organizational membership, gender and age cohorts (Tajfel and Turner, 1985), which leads to the perception of belongingness to some human aggregate, e.g. an organization or a work group (Ashforth and Mael, 1989). As a result of such perception, the SIT literature suggests that social identification affects the outcomes associated with co-operation and altruistic

behaviors, which is conceptualized as a dimension of citizenship behaviors (Podsakoff et al., 2000). In addition, the perception of belongingness may lead to a redefinition of one's work role within the organization (Morrison, 1994). For instance, employees high in affective commitment perceive their roles more broadly, and are more likely to engage in citizenship behaviors like helping others. In a similar way, O'Reilly and Chatman (1986) presented evidence that a high level of commitment was related to prosocial behavior such as voluntary participation and contributions beyond those narrowly defined by work roles (Lee, 2001). Another theory, social exchange perspective (Thibaut and Kelley, 1959; Adams, 1965) suggests that people who are committed to their company for various reasons will increase their effort on the job through mechanisms of social reciprocity (e.g. Organ, 1988). Social exchange theory suggests that increased effort on the job would serve as a means to receive rewards from colleagues, supervisors and/or the organization as a whole. Alternatively, when employees experience positive exchanges with the organization, they will reciprocate with higher levels of commitment, which will motivate them to contribute to the organization with in-role behaviors such as reduced turnover and absenteeism, better performance or extra-role behaviors.

Perceived organizational support (POS) refers to employee global beliefs that their organization cares about them personally and values their contributions to the organization (Eisenberger et al., 1990; Eisenberger et al., 1986; Fuller et al., 2006). Prior research has shown that employee perceptions of organizational support are linked to employee attendance, commitment, performance, and OCB (Eisenberger et al., 1990; Eisenberger et al., 1986; Settoon et al., 1996). The theory that links perceived support and employee behavior is also based on the concepts of social exchange (Blau, 1964) and reciprocity (Gouldner, 1960). For example, expressions

of positive regard in the form of support to an employee might create a feeling of indebtedness and a corresponding obligation to reciprocate on behalf of the employee (Setoon and Mossholder, 2002). Due to its voluntary and discretionary nature, citizenship behavior provides a means of fulfilling this obligation and reinforcing a general belief in the intrinsic value of the exchange relationship. Fuller and colleagues (2006) have found empirical evidence for the relationship of POS and organizational commitment. They argued that since POS produces in people a feeling of obligation to care about the organization's well-being, employees put forth effort that helps the organization achieve its goals. Commitment to the organization serves as a way to discharge such feeling of obligation. Affective organizational commitment is specifically suggested as being related to the exchange process with the organization (Cohen and Keren, 2008). The relationship of commitment to OCB (Meyer et al., 2002) shows that commitment pushes employees to be more involved in informal activities like OCBs in the organization. Thus, individuals' perceptions of positive exchanges with the organization would lead to affective organizational commitment, which in turn would encourage employees to exhibit extra-role behaviors of helping others and being involved in organization related actions. In a similar way, perceptions of such exchanges would affect normative commitment, which is based on moral forces within the employees who feel that they ought to be committed to the organization, would also push them to invest more in performing their formal obligations and be more involved in making informal contributions to the organization. In a meta-analysis, Organ and Ryan (1995) found no support for the relationship between employee continuance commitment to the organization and helping or compliance related behaviors when affective and continuance commitment were analyzed separately. Continuance commitment, dealing with the

perceived costs of leaving the organization, seems not to be a relevant factor in predicting in-role performance and/or extra-role behaviors.

Given the findings from literature pertaining to the relationships between POS, organizational commitment and OCB, this study aims to test the effect of POS as an antecedent of organizational commitment, which is in turn expected to be positively related to citizenship behaviors of helping and civic virtue.

H1a: Affective organizational commitment mediates the relationship between POS and helping behaviors.

H1b: Normative organizational commitment mediates the relationship between POS and helping behaviors.

H1c: Affective organizational commitment mediates the relationship between POS and civic virtue behaviors.

H1d: Normative organizational commitment mediates the relationship between POS and civic virtue behaviors.

As discussed above, the dominant theory that relates commitment forms and outcomes follows the exchange approach. Employees who experience positive exchanges with the organization, the job, or the work group are expected to reciprocate with higher levels of commitment, which in turn motivates them to contribute to the organization in other ways, such as reduced turnover and absenteeism or better in-role performance (Sturges, Conway, Guest, and Liefooghe, 2005) and perhaps with extra-role behaviors. Social exchange theory (e.g., Thibaut and Kelley, 1959; Blau, 1964) suggests that if employees receive support from their employers, such as (job or occupation related) training and career advice, then they

will in turn feel obliged to reciprocate (Eisenberger et al., 1990). Training programs and mentoring experiences in an organization can be considered as forms of organizational occupation related support in terms of letting people follow and excel in developments related to their occupations. Therefore, through occupation related support from organization, employees would be able to invest in both their own development and the effective functioning of the organization.

Perceived organizational support has been linked to in-role behaviors of job performance positively and withdrawal behaviors such as absenteeism and turnover negatively (Rhoades and Eisenberger, 2002). Psychological contract theory suggests that employees are motivated to reciprocate when they consider that the employers fulfill their obligations and realize promised future inducements related with themselves (Coyle-Shapiro, 2002). Such reciprocation may take the form of organizational citizenship behaviors (Coyle-Shapiro and Kessler, 2000; Robinson and Morrison, 1995; Robinson, 1996). Occupation related positive exchanges (OPOS) (i.e. job/occupation related training, recognition of one's profession as adding specific value to organizational operations) with the organization are likely to increase employees' affective and normative occupational commitments. In turn, such commitments (i.e. one's affective attachment and loyalty to the occupation) are likely to push employees to exhibit extra-role behaviors of helping others to improve in the same job or occupation, and investing their time and effort in occupation related activities in the organization. Continuance occupational commitment, related with the costs of leaving the occupation, does not seem to have relevance within this framework.

H2a: Affective occupational commitment mediates the relationship between occupation related POS (OPOS) and helping behaviors.

H2b: Normative occupational commitment mediates the relationship between OPOS and helping behaviors.

H2c: Affective occupational commitment mediates the relationship between OPOS and civic virtue behaviors.

H2d: Normative occupational commitment mediates the relationship between OPOS and civic virtue behaviors.

OCB and Work Values

Values are referred to as desirable states, objects, goals, or behaviors that go beyond specific situations and applied as normative standards to judge and to choose among alternative modes of behavior (Schwartz, 1992). Ros et al. (1999) defined work values as "beliefs pertaining to desirable end-states (e.g. high pay) or behavior (e.g. working with people)" (p.54) and positioned them as verbal representations of individual, group, and interaction requirements. Elizur and colleagues (1991) identified three types of work values: (1) cognitive values, (2) instrumental values, and (3) affective values. Certain work values focus on opinions, beliefs, and considerations, e.g. interesting work, achievement, responsibility, and independence; which are considered as cognitive or intrinsic. Values like health, physical and economic security, pay, and work conditions are of material, instrumental or extrinsic in nature and have direct concrete or practical consequences. Another class of work values refers to items expressing feelings mainly in the context of

interpersonal relations such as esteem from co-workers and may be classified as affective.

Empirical research on work values has investigated their relations to contextual variables like commitment, rather than in- or extra-role behaviors. In an attempt to search if work values shaped people's feelings towards the organization, using an East Asian sample, Putti, Aryee and Liang (1989) found that intrinsic work values are more associated with organizational commitment than are instrumental values. In an American sample, Kidron (1978) observed that work values have a higher correlation with moral commitment to the organization than with calculative commitment. Koslowsky and Elizur (1990), in an Israeli group of subjects, observed organizational commitment to be positively related with cognitive work value items such as independence, job interest, and use of abilities, but not with instrumental or affective items. Nevertheless, one instrumental item, pay, was found to be positively correlated with commitment (Sagie, Elizur and Koslowsky, 1996).

Since work values are stated as beliefs concerning desirable end-states or behavior, they have a potential to be considered as being related to an individual's workplace behaviors, especially the ones cognitive and affective in nature. Values are perceived to be the cognitive representations of needs and motives (Locke, 1991). They are considered to represent both individual needs and societal and cultural demands (Rokeach, 1973). Several motivation theorists placed an emphasis on the motivational aspect of work values (Herzberg, Mausner and Snyderman, 1959; Super, 1962). French and Kahn (1962) proposed values to motivate goal-directed behavior through inducing valence on objects, behavior, or states of affairs. Individuals are expected to engage in behaviors that satisfy their needs or goals, and are in accordance with their values (Lawler, 1987; Kanfer and Ackerman, 1989;

Vroom, 1964). Thus, goals would serve as a reference point in investigating the values as antecedents of extra-role behaviors with the focus on motivation theories. According to motivation theories (e.g. Porter and Lawler, 1968; Vroom, 1964; Alderfer, 1972), the values that are cognitive in nature (i.e. advancement) are expected to be related to extra-role behaviors. For exploring the relation of OCB and intrinsic/cognitive work goals, volunteerism as a prosocial phenomenon can serve as an explanation (Penner, Midili, and Kegelmeyer, 1997), since it is very similar to OCB in its voluntary and discretionary nature. Hanson (1991) described volunteerism as a type of formal planned helping, which is cognitive in nature. People are likely to exhibit citizenship behaviors for the goal of career advancement (by preparing for a new career or position), which they think will increase their self-esteem and self-worth (Kabasakal, Dastmalchian, and Imer, forthcoming). In addition, people who consider social relations with superiors or co-workers as crucial would also be more motivated to engage in helping others. Extrinsic/material work values are expected to be negatively associated with prosocial behaviors of sportsmanship, assuming that high beliefs for end-states like pay or good benefits would lead to more complaints about work-related situations, hence behaviors in a less "sportsman" way.

H3a: Work values that are intrinsic/cognitive in nature are positively associated with helping, civic virtue and sportsmanship behaviors.

H3b: Work values that are social/affective in nature are positively associated with helping behaviors.

H3c: Work values that are extrinsic/material in nature are negatively associated with sportsmanship behaviors.

OCB and Affect

Researchers have stated that dispositional individual differences play an important role in predicting whether an employee would engage in citizenship behaviors. It is believed that some people would be more likely to show prosocial behaviors. Studies on contextual performance have suggested personality traits to be particularly good predictors of contextual performance (e.g., Borman and Motowidlo, 1993; Morgeson, Reider, and Campion, 2005; Van Scotter and Motowidlo, 1996).

However, the studies examining the relationship between individual differences and OCB have provided ambiguous results (e.g., George, 1991; Nikolaou and Roberston, 2001; Organ and Konovsky, 1989; Smith et al., 1983). For instance, Organ and Konovsky (1989) examined the influence of the personality trait of positive affect (PA) on OCB and found that when PA was studied simultaneously with cognition, it did not add to the explanation of variance in OCB. From a mood perspective, George (1991) tested the relationship between PA as a personality trait, mood as a state and citizenship behaviors. His results suggested the relationship of mood state to OCB, when measured separately. George and Brief (1992), argued for the importance of the trait positive affect to measure organizational spontaneity, which is a similar construct to OCB. In a study, Ball, Trevino and Sims (1994) found no significant relationship between negative affect and OCB. Organ (1994), in a review of empirical studies of affect related measures of personality and OCB, found weak and insignificant results for relationships of such measures and OCB.

Affect is claimed as a personality structure representative of generalized affective states (Clark and Isen, 1982). Research provides evidence for the stability of such trait for periods as long as thirty years (Williams and Shiaw, 1999).

Employees with the disposition of positive affect are more likely to perceive their work environment, whether in terms of co-workers or situations, in a more positive way (George, 1996). In addition, people with a more positive outlook might well be inclined to preserve such feelings (e.g. Isen and Baron, 1991; Williams and Shiaw, 1999). Similarly, research for the link between negative affect and OCB highlight the potential for negative affectivity to restrain helping gestures (e.g., Agho, Price and Mueller, 1992). People with negative affect are more inclined to interpret the stimuli from the external world negatively, and stay distant from their external world in the workplace by holding back from prosocial actions (Somech and Ron, 2007).

One important theoretical development of notice in linking dispositional affect and attitudes or behaviors is Forgas and George's (2001) affect infusion model (AIM). According to AIM, affect has a direct impact on individuals' cognitions and behaviors. AIM suggests people's attitudes to be partially a function of the affect that "infuses" or influences their cognitive processing in forming evaluations of the attitude object in question. The AIM implicitly appears as a direct effects model, which does not assume any mediating influence between affect whether as a trait or state, and cognitive evaluations.

Therefore, it would be reasonable to expect that people holding positive outlook in general would engage in each type of citizenship behaviors and negative outlook would lead to decreased civic virtue and sportsmanship behaviors.

H4a: Positive affect is positively associated with helping, civic virtue and sportsmanship behaviors.

H4b: Negative affect is negatively associated with civic virtue and sportsmanship behaviors.

The hypotheses of the study are summarized in Figure 1. The four sets of hypotheses investigate the proposed relationships between the contextual and dispositional antecedents and three types of OCBs. The first two sets aim to explore the mediation (if any) of two forms of commitments (organizational and occupational) between perceptions of organizational and occupation related support and OCBs. The third set considers the relationship of dispositional work values and OCBs, while the fourth set explores the relationships between dispositional affect and OCBs.

In addition, this study aims to add to the OCB literature by comparing participants representing two distinct highly professional occupations (teaching and engineering) for assessing if occupation accounts for any variance in the relationships between the antecedents and OCBs. Earlier investigations of OCBs have not questioned the construct with emphasis on occupation as moderating the relationships between OCBs and their correlates. Thus, this study aims to search answers for the following research questions:

Research Question 1: Does occupation moderate the relationships between the contextual and dispositional antecedents and OCBs?

The hypotheses investigate the relationships between antecedents and OCBs separately. One purpose of this study is to explore the relative significance of contextual and dispositional antecedents of OCBs simultaneously.

Research Question 2: Provided the theory for the potential contextual and dispositional antecedents of OCB, what are the contextual and dispositional variables that account for the variance in each of the three types of citizenship behaviors; helping, civic virtue and sportsmanship; when all the study variables are considered simultaneously?

This research question also allows for testing the effects of continuance organizational and occupational commitments (if any), which are mentioned in theory but not investigated in the hypotheses. Moreover, answer for this question would let one feel more confident about the nature and antecedents of OCBs, since the most accepted three types of OCBs are intended to be explained by common antecedents simultaneously.

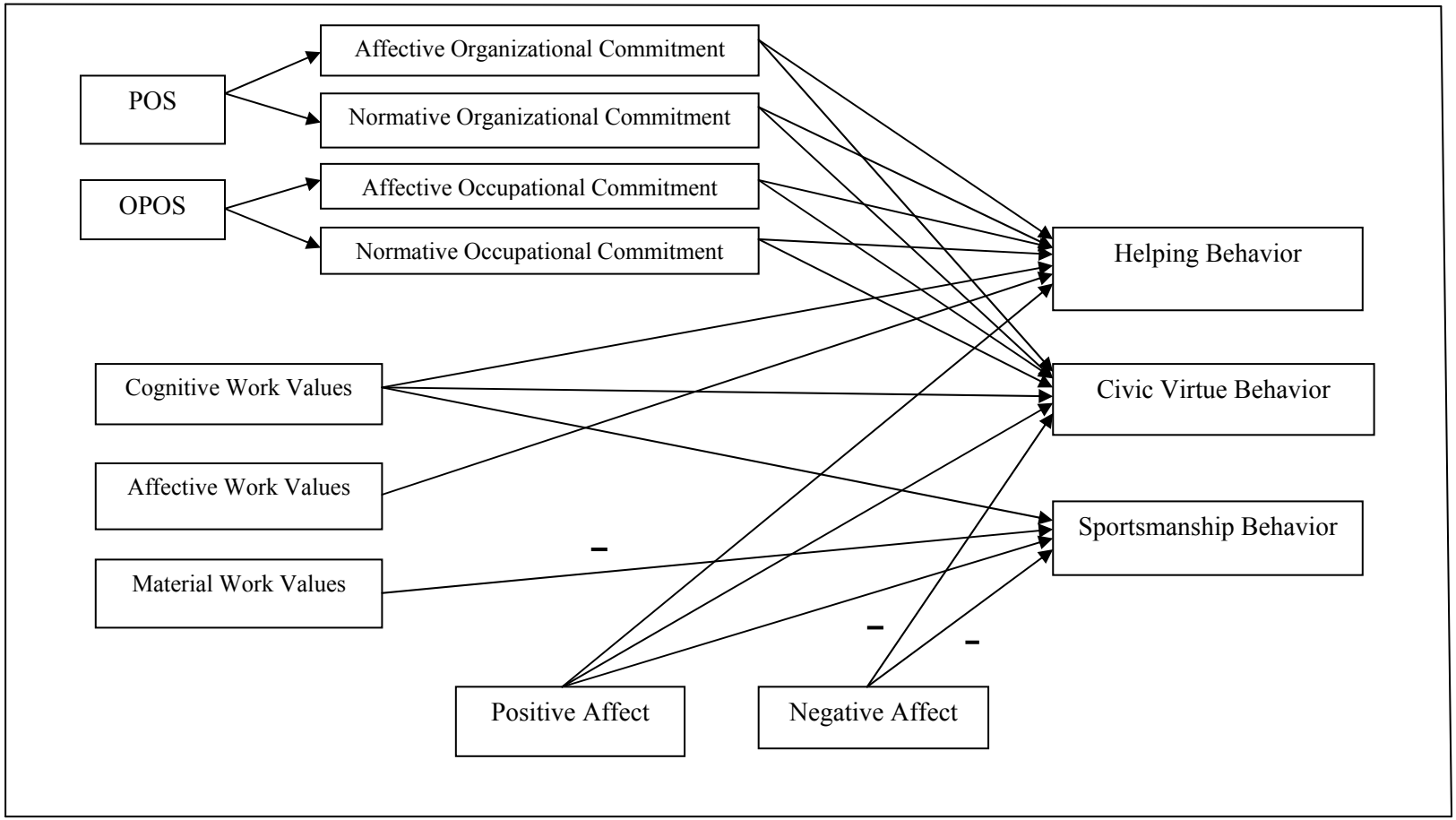

Figure 1 Summary of hypothesized relationships between antecedents and OCBs

CHAPTER IV

METHODOLOGY

This chapter presents the methodology of the study. The methodology covers the variables and their measures (scales) that make up the questionnaire utilized to test the hypotheses and proposed relationships in the study. English and Turkish versions of the questionnaire are provided in Appendices A and B. In addition, sequencing and translation of the questionnaire items, sample and procedures are explained.

Variables and Measures

The hypotheses of the study aim to explain the dependent variable of OCB measured with three types of behaviors: helping, civic virtue and sportsmanship. The independent variables to explain the three types of behaviors are the hypothesized contextual and dispositional antecedents. Contextual antecedents are organizational and occupational commitments, perceived organizational support and perceptions of occupation related support from the organization. Dispositional antecedents include work values, positive and negative affect.

Dependent Variable

Researchers have used various scales to measure the construct of OCB and types of such behaviors. Seven common themes emerge in more than thirty potentially different forms of OCBs, which could be summarized as: helping, sportsmanship, civic virtue, organizational loyalty, organizational compliance, individual initiative and self development (Organ et al., 2006). The most widely used and validated scales of three conceptually different types of OCBs are used in this study to measure helping, civic virtue and sportsmanship behaviors.

Helping behaviors have been conceptualized as an important type of OCBs by almost all of the area researchers (e.g., George and Jones, 1997; Podsakoff et al., 1997; Borman and Motowidlo, 1993, 1997; Van Scooter and Motowidlo, 1996; Podsakoff and MacKenzie, 1994; George and Brief, 1992; Williams and Anderson, 1991; Graham, 1989; Organ, 1988; Smith et al., 1983). Such behaviors are conceptually related with helping others in work related problems as well as preventing the occurrence of such problems (Podsakoff et al., 1997).

Civic virtue behaviors involve macro-level or organization related concerns like willingness to take an active part in the governance of the organization, being interested in potential opportunities and threats to the organization, looking for the best interests of the organization as a whole, even at personal cost (Organ et al., 2006).

Sportsmanship behaviors are identified as not complaining about trivial matters and maintaining a positive outlook even when challenged by difficult situations (Podsakoff et al., 1997; Podsakoff and MacKenzie, 1994).

Organizational citizenship behaviors are measured by the three commonly recognized and conceptually distinct dimensions of helping behavior, civic virtue, and sportsmanship (Podsakoff et al., 1997; Podsakoff and MacKenzie, 1994; Organ, 1988, 1990a, 1990b). Thirteen items developed by Podsakoff et al. (1997) measured the self-reported behavior related ratings of respondents on a 7-point Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree.

1. I help out others who fall behind in their work.
2. I willingly share their expertise with others.
3. I try to act like a peacemaker when others have disagreements.
4. I take steps to try to prevent problems with coworkers.
5. I willingly give of my time to help others who have work-related problems.
6. I “touch base” with others before initiating actions that might affect them.
7. I encourage others when they are down.
8. I provide constructive suggestions about how others can improve their effectiveness.
9. I am willing to risk disapproval to express my beliefs about what's best for others/organization.
10. I attend and actively participate in meetings.
11. I always focus on what is wrong with our situation, rather than the positive side. (R)
12. I consume a lot of time complaining about trivial matters. (R)
13. I always find fault with what others are doing. (R)

Independent Variables

Organizational and Occupational Commitments

Meyer and Allen (1991)'s three component conceptualization of organizational commitment is followed in this study. According to Meyer and Allen (1991, p. 67), affective component of organizational commitment refers to an employee's "emotional attachment to, identification with, and involvement in the organization", continuance commitment is identified as an employee's "awareness to the costs associated with leaving the organization", while normative commitment "reflects a feeling of obligation to continue employment". Such conceptualization underlines the employee's relationship with the organization together with his/her decision to continue or discontinue working in the organization.

Extending the three component conceptualization of organizational commitment to occupational commitment, Meyer et al. (1993) suggested a complete explanation for an individual's relationship to his/her occupation. Affective commitment to an occupation represented a person's strong desire to be in that occupation, continuance commitment to an occupation is associated with the perceived high costs for leaving the occupation, and normative commitment is related to the obligation to remain within the occupation.

The three dimensions of affective, normative and continuance of organizational and occupational commitments are measured using Meyer, Allen and Smith's (1993) organizational and occupational commitment scales. Meyer et al. (1993) extended their earlier study (Allen and Meyer, 1990) on organizational commitment to occupational commitment. The multidimensionality of organizational

commitment was applied to occupational commitment in the same way. The respondents were expected to indicate their level of agreements with the following statements on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree).

Affective organizational commitment items:

1. I would be very happy to spend the rest of my career with this organization.
2. I really feel as if this organization's problems are my own.
3. I do not feel a strong sense of "belonging" to my organization. (R)
4. I do not feel "emotionally attached" to this organization. (R)
5. I do not feel like "part of the family" at my organization. (R)
6. This organization has a great deal of personal meaning for me.

Continuance organizational commitment items:

7. Right now, staying with my organization is a matter of necessity as much as desire.
8. It would be very hard for me to leave my organization right now, even if I wanted to.
9. Too much of my life would be disrupted if I decided I wanted to leave my organization now.
10. I feel that I have too few options to consider leaving this organization.
11. If I had not already put so much of myself into this organization, I might consider working elsewhere.
12. One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.

Normative organizational commitment items:

13. I do not feel any obligation to remain with my current employer. (R)

14. Even if it were to my advantage, I do not feel it would be right to leave my organization now.

15. I would feel guilty if I left my organization now.

16. This organization deserves my loyalty.

17. I would not leave my organization right now because I have a sense of obligation to the people in it.

18. I owe a great deal to my organization.

Affective occupational commitment items:

1. My occupation is important to my self-image.

2. I regret having entered this profession. (R)

3. I am proud to be in this profession.

4. I dislike being a … (occupation title) ... (R)

5. I do not identify with this profession. (R)

6. I am enthusiastic about this profession.

Continuance occupational commitment items:

7. I have put too much into this profession to consider changing now.

8. Changing professions now would be difficult for me to do.

9. Too much of my life would be disrupted if I were to change my profession.

10. It would be costly for me to change my profession now.

11. There are no pressures to keep me from changing professions. (R)

12. Changing professions now would require considerable personal sacrifice.

Normative occupational commitment items:

13. I believe people who have been trained in a profession have a responsibility to stay in that profession for a reasonable period of time.

14. I do not feel any obligation to remain in this profession. (R)

15. I feel a responsibility to this profession to continue in it.

16. Even if it were to my advantage, I do not feel that it would be right to leave this profession now.

17. I would feel guilty if I left this profession.

18. I am in this profession because of a sense of loyalty to it.

Perceived Organizational Support (POS) and Occupation related POS

Eisenberger et al. (1986) suggested the construct perceived organizational support referring to employees' perceptions concerning the degree to which the organization values and acknowledges their contributions and cares about their well-being.

Perceived organizational support is assessed by using the eight-item version of Eisenberger and colleagues' (1997) POS scale (Eisenberger, Cummings, Armeli, and Lynch, 1997). Individuals are expected to indicate their agreement with the items by using a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree).

Perceived organizational support items:

1. My organization strongly considers my goals and values.

2. Help is available from my organization when I have a problem.

3. My organization really cares about my well-being.

4. My organization is willing to help me when I need a special favor.

5. If given the opportunity, my organization would take advantage of me. (R)

6. My organization shows very little concern for me. (R)

7. My organization cares about my opinions.

8. My organization would forgive an honest mistake on my part.

Extending the approach for perceptions of organizational support, this study proposes a construct for perceptions of occupation related support to measure individuals' cognitive evaluations of organization's support for their career development or occupational advancement. The four-items to measure occupation related organizational support are derived from the eight item version of Eisenberger et al.'s (1997) POS scale by modifying four of the relevant items, specifically the first, second, fourth and seventh items . This scale is to be tested for the first time in the literature. Validation of this scale is presented later in this chapter. Reliability score and factor structure of the scale are provided in Chapter 5.

Occupation related POS items:

1. My organization strongly considers my occupational advancement.
2. Help is available from my organization when I have occupation related problems.
3. My organization is willing to help me when I need special training for an occupational issue.
4. My organization acknowledges my expertise in my occupation.

Work Values

The construct of work values is conceptualized by Elizur et al. (1991) in a two facet perspective. The first facet, modality of outcome, distinguishes work outcomes into three subsets of material/instrumental/extrinsic (outcomes that are of practical use), affective/social (outcomes that imply interpersonal relations) and cognitive/intrinsic (outcomes that are related to one's internal dynamics including interest, achievement, and responsibility). The second facet, system performance contingency, focuses on

rewards (incentives provided by the management to motivate employees) and resources (form the basis for rewards), is not related to the scope of this study.

The construct of work values is measured by twenty-four items of Elizur et al.'s (1991) work values questionnaire. The respondents were asked to indicate the importance of work values items on a 7-point Likert type scale from 1=very unimportant to 7=very important.

The twenty-four items of work values included job interest, job responsibility, fair supervisor, independence, use of abilities, personal growth, job achievement, meaningful work, advancement, work feedback, esteem as a person, recognition for performance, job security, good company to work for, influence at work, work conditions, job status, pay, co-workers, influence in the organization, interaction with people, benefits, contribution to society and convenient hours.

Affect

Watson and colleagues' (1988) conceptualization of positive affect as presenting the extent to which an individual feels enthusiastic, active and alert; and negative affect as considering a variety of aversive mood states like anger, guilt, fear and nervousness is followed. Positive and negative affect as two distinct dimensions of affect as a personality trait are measured with the Positive and Negative Affectivity Schedule (PANAS) (Watson et al., 1988). The PANAS is made up of twenty mood-relevant adjectives. Positive and negative affect are measured with ten items each to capture each disposition. With the PANAS, affect as a state is generally measured for specified time periods, so to measure affect as a trait, general feelings are asked for (Watson et al, 1988). Specifically, participants were asked to indicate the extent to

which they generally feel the way that each adjective stated on a scale ranging from 1=not at all to 7=extremely, for a trait measure of affect. The PANAS has been extensively validated (for validation evidence, see Watson et al., 1988; Watson, 1988; Watson, Clark and Carey, 1988).

The positive affect scale included the items interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive and active. The negative affect scale consisted of the items distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery and afraid.

Demographics

Employee demographics of age, gender, occupation, level of education in categories (high school, applied school, university, masters, Ph. D.), undergraduate institution, undergraduate department, tenure in terms of full time work experience (number of years), full-time work experience in the current organization (number of years) and monthly salary range in categories were expected to be responded by the participants.

Age of the participants was required in intervals. The scaling for age was asked in levels covering: 1=less than 20, 2=21-25, 3=26-30, 4=31-35, 5=36-40, 6=41-45, 7=45-50 and 8=more than 50. Gender was coded as 1=male and 2=female. Finally, the monthly salary was also asked in intervals (for the intervals, please refer to the questionnaires in Appendices A and B).

Sequence of Questionnaire Items

The sequencing of the scales measuring the dependent and independent variables in the questionnaire has been done in relation to the suggestions from the literature. In order to reduce information salience of the antecedents as attitudes and affect, items of organizational citizenship behaviors are presented in the beginning. Work values, affect, organizational and occupational commitments, perceived organizational and occupation related organizational support measuring attitudes and affect followed the items for citizenship behaviors. Demographics are asked for in the end of the questionnaire in to control for the overwhelming of respondents due to exposure of personal information.

For a better understanding of people at work, Salancik and Pfeffer (1978) offered social information processing approach that offers "insights into aspects of behavior and job attitudes that require serious attention" (p. 250). To explain work related behaviors and attitudes, they focused on the potential effects of context and consequences of past choices on job attitudes and behavior than individual predispositions within social information processing approach. They also emphasized the effect of salience referring to "information the individual is immediately aware of" (Salancik and Pfeffer, p. 226). Since the purpose of the study is measuring behavior by its contextual and dispositional antecedents, it was found more appropriate to measure behavior before the explanatory constructs in order to control for information salience following Salancik and Pfeffer (1978)'s comments stated as:

> Individuals develop attitude or need statements as a function of the information available to them at the time they express the attitude or need. The form and content of that expression are affected by the

> request for the attitude, the purpose for which it is requested, and any other fact that might affect the relative saliency of information relevant to the person deriving the attitude (p. 226).

To be more specific, when respondents are exposed to questions about their commitment to their organizations and occupations, different feelings or mood states, and their perceptions of support from their organizations, they could be inclined to report more positive behaviors of helping, civic virtue and sportsmanship. Information salience might direct their attention to attitudes and dispositions and they might be deceived by their attitudes and dispositions to respond behavioral inquiry in line with corresponding contextual variables and dispositions.

In this study, the sequence of questions emphasizes behavior first, work values and affect after behavior, organizational and occupational commitments, perceived organizational and occupation related organizational support, and demographics in the end. This sequence places the items related to perceptions of occupation related organizational support right before demographics and the psychometric properties of this four item scale is presented in the following chapter.

Translation of the Questionnaire Items

The items of the questionnaire are translated into Turkish from their original (English) versions by the author, except for twelve of the organizational commitment items. These twelve items have been translated into Turkish and used by Wasti (2000) earlier in a research conducted to examine the factors affecting organizational commitment in Turkish culture. Some of these items were also used for the translation of the occupational commitment items, since organizational and occupational commitment items were similar, i.e. occupational items were created

and modified by the authors of organizational commitment items (Meyer and Allen, 1991; Meyer et al., 1993).

The items were then back translated by two bilinguals. The results were compared with the original items of the scales. The semantic differences as well as the unclear items were corrected and clarified by the author in the Turkish version of the questionnaire.

A further check for the clarification of items has been carried out by a pre-test sample consisting of five teachers and five engineers to represent the selected two occupations. The questionnaire was ready to be applied after the items were further purified with the responses from pre-test sample.

Sample and Procedures

For the purpose of analyzing if organizational citizenship behaviors differ in two occupations having different characteristics working in the private sector were targeted. The two occupational groups included teachers and engineers, in which teachers represented a social focused occupational group while engineers represented a technical focused occupational group.

Pre-Test Sample

A pre-test sample of five teachers and five engineers working in private sector was selected for clarifying and purifying the questionnaire items. This sample consisted of six males and four females, all of whom had university degrees. Each respondent was asked to fill in the questionnaire and take notes next to the items that were

unclear for them. The feedback received from the pre-test sample indicated that the items were clear to a great extent and some minor changes have been made in the questionnaire according to the reports of the pre-test sample.

Actual Sample

The population targeted included the teachers and engineers as representing two occupational groups, being actually involved in jobs that are consistent with their education. The sample for the study included institutions from the private sector in Istanbul in order to investigate the differences in terms of citizenship behaviors, contextual variables, affect and values, if any, across two occupations.

The questionnaire had more than a hundred items and the feedback from the pre-test sample suggested the required time to fill in the questionnaire was between ten and fifteen minutes. In the light of this observation, since the study required voluntary participation, convenience sampling instead of probabilistic sampling was preferred, after a few attempts (which were not so fruitful) to contact the Human Resources departments of several companies and the Directors or Assistant Directors of potential private high schools. Therefore the questionnaires were administered in the organizations with direct contacts first and the rest were contacted through referrals, which is known as the snowballing technique. Engineers were targeted first, since the high schools were on semester vacation at the start of data collection.

Ten companies were visited for engineer participants with the contacts of Chief Executive Officers, Human Resources departments or department heads. The study was presented to the engineers either by the researcher or by the researcher's contact person in the organization. The questionnaires were distributed to the

engineers and were collected an hour later or a few hours later by the researcher, and in a few cases, a few days later depending on the workload of the participants. The more than one day collections of the questionnaires were coordinated by a predefined employee from Human Resources department in sealed envelopes. These questionnaires were either collected by the researcher in person, or mailed to her. Out of two hundred and fifty questionnaires that were distributed, 221 returned, representing an 88% of response rate. Forty of these questionnaires were excluded from the analyses since they represented a sample out of Istanbul, and one respondent reported large amount of missing data, so the final sample for engineers consisted of 180 participants from nine organizations.

The composition of these nine organizations was not uniform. Four companies were from information technology sector with 105 engineers accounting for 58%, two organizations from automotive sector with thirty one participants accounting for 17%, two organizations were from food processing and control sector with twenty seven participants making up of 15%, and one organization from manufacturing (industrial boilers and press vessels) sector with seventeen participants making up of almost 10% of the sample for engineers. Not every participant responded to the demographics of the questionnaire. Of the 171 respondents who reported their gender information, 60.8% was male and 39.2% was female. The frequencies for the sample of engineers are presented in Table 1.

Table 1 Frequency and Gender Percentages for Engineers Sample

Engineers	Frequency	Percent	Male %	Female %
Company 1	43	23.9	81.1	18.9
Company 2	11	6.1	36.4	63.6
Company 3	17	9.4	80.0	20.0
Company 4	7	3.9	57.1	42.9
Company 5	20	11.1	70.0	30.0
Company 6	28	15.6	46.4	53.6
Company 7	11	6.1	80.0	20.0
Company 8	16	8.9	37.5	62.5
Company 9	27	15.0	48.1	51.9
Total	180	100.0	60.8*	39.2*

* %s for gender composition are based on 171 reports for engineers.

The sampling procedure for teachers was similar to the one applied for engineers. Eleven high schools were visited for data collection. High school list within the subset of private high schools prepared by the Ministry of Education for the year 2008 was taken as reference point. The list contained 164 private high schools in Istanbul. The sample for the study represented 6.7% of the population in Istanbul. Four of the eleven schools visited were located in the Asian side and the rest were in the European side of Istanbul. No permission was taken from the Ministry of Education Branch in Istanbul, since the study was anonymous and voluntary, and would have caused the participants to feel threatened. Two of the schools in the above list were chosen as the starting point with the help of known Directors, and the rest of the data collection was completed with their references.

The response rate of teachers was well-below that of engineers. Out of 330 questionnaires distributed to the teachers in eleven private high schools, responses were collected from 185 participants, accounting for a 56% response rate. Five of these responses were not appropriate for inclusion in the sample due to having large

amount of missing data. The reason for this rate was either time restrictions or the suspicious attitudes of teachers as explained by the relevant contact persons from the schools. Data was collected by leaving the questionnaires for up to one week in a school. They were then either collected by the researcher in sealed envelopes from the final contact person, who was the secretary to the high school Director in each school, or mailed to her.

Although the number of schools in Asian and the European sides were unequal, the participants' distribution was 49% from Asian side versus 51% from European side. Of the 180 participants, 175 reported gender information. The sample of teachers consisted of 24.6% males and 75.4% females. Frequencies and institution focused gender percentages for sample of teachers are presented in Table 2.

Table 2 Frequency and Gender Percentages for Teachers Sample

Teachers	Frequency	Percent	Male %	Female %
High School 1	19	10.6	26.3	73.7
High School 2	12	6.7	8.3	91.7
High School 3	11	6.1	36.4	63.6
High School 4	10	5.6	22.2	77.8
High School 5	12	6.7	16.7	83.3
High School 6	37	20.6	21.6	78.4
High School 7	21	11.7	11.1	88.9
High School 8	19	10.6	15.8	84.2
High School 9	9	5.0	33.3	66.7
High School 10	10	5.6	11.1	88.9
High School 11	20	11.1	60.0	40.0
Total	180	100.0	24.6*	75.4*

* %s for gender composition are based on 175 reports for teachers.

Since a perceived occupation related organizational support scale did not exist in the literature, it was created in this study. Before proceeding with the findings, the

validation for the perceived occupation related organizational support (OPOS) items is introduced.

Validation of the Measure for Perceived Occupation Related Organizational Support

A review for the construct POS was provided in Chapter 2 and the importance for occupation related POS was emphasized in Chapter 3. Provided the necessity of an OPOS construct, this section outlines the types of measurement validity and attempts to provide evidence for the validity of four-item OPOS scale. After presenting the four item OPOS scale, the types of measurement validities are defined and tested (for a detailed review of measurement validity, see website for Knowledge Base – KB, http://www.socialresearchmethods.net/kb , version current as of October 20, 2006).

The construct perceived organizational support (POS) was operationalized to measure employees' perceptions of organizations' care for themselves (Eisenberger et al., 1986). In line with the social exchange perspective (Blau, 1964) underlying the conceptualization of POS, it would be reasonable to expect that such perceptions of organizational support could be extended in other subdomains like occupation. The importance of such an extension to occupation is that it provides a means for a complete understanding of how important it is for the organizations to employ occupationally advanced people. In addition, it provides a measure for employees' evaluations with respect to their organizations' care for their occupational efficacy.

In this study, four of the eight items short version of POS scale developed by Eisenberger et al. (1986), which then were used to measure POS by Eisenberger et al.

(1997), were modified to measure employees' perceptions of support by their organization related to their occupations. The content of these four items included the issues of occupational advancement, occupation related trainings, help for occupation related problems and acknowledgement of expertise in an occupation. Specifically, these items are:

1. My organization strongly considers my occupational advancement.

2. Help is available from my organization when I have occupation related problems.

3. My organization is willing to help me when I need special training for an occupational issue.

4. My organization acknowledges my expertise in my occupation.

In order to assess the usefulness or accuracy of a measure, Trochim (2006) uses the general name of "*construct validity*" for assessing the validity issues related with a construct. He suggests that construct validity is evaluated by translation and criterion related validities. "Translation validity" encompasses face and content validity, which attempt to assess the degree to which accurately translated into operationalization. *Face validity* is assessed by looking at the measure to capture the domain being sampled. *Content validity* is assessed by examining if the items of a measure are adequate to discover the domain of the characteristic being captured. Content validity assumes that one has a detailed description of the domain for a construct. A measure is assumed to lack content validity if the actual items are different from the possible domain, which is partly a matter of judgment. "Criterion-related validity" checks the operationalization of the measure against some criterion. Criterion-related validity differs from content validity in its focus on predicting the performance of the operationalization of a construct based on the theory of the

construct, while content validity uses the construct definition itself as the criteria. Trochim (2006) offers four types of criterion-related validity, which differ among the criteria they use as standard for judgment. The four types of criterion-related validity include predictive, concurrent, convergent and discriminant validities. *Predictive validity* is used to assess if the operationalized measure is able to predict what it is theoretically expected to predict. Predictive validity is evaluated with the correlation between the measure in question and the construct it is expected to predict, in which higher correlations indicate predictive validity. *Concurrent validity* assesses if the operationalization of a construct is related to a theoretically suggested criterion at the same point in time. *Convergent validity* suggests that different methods measuring the same construct should be highly correlated, while *discriminant validity* requires low correlations of a measure under question with constructs that are not supposed to be related.

"Translation validity" for the OPOS scale is assessed by face validity with the help of two professors working on the field of organizational behavior. It is not possible to assess the content validity, since there is lack of a good detailed description of the domain. The content of the OPOS was seen as appropriate to measure the construct.

"Criterion-related validity" is assessed by the four types of validities described above. *Predictive validity* is assessed by examining the correlation between occupation related POS and civic virtue behavior, since OPOS is implicitly proposed to predict such behavior in Research Question 2. Though not very high, the summated OPOS scale and civic virtue behavior yielded the Pearson correlation of .337 significant at .01 level (see Table 17 in Chapter 5). *Concurrent validity* is assessed by examining the correlation between occupation related POS and its

theoretical correlate of affective organizational commitment. The summated OPOS scale showed Pearson correlation of .539 significant at .01 level (see Table 17 in Chapter 5).

Campbell and Fiske (1959) presented the Multi-Trait Multi-Method Matrix (MTMM), which assesses both *convergent* and *discriminant validity* at the same time using different methods for measuring the same construct. MTMM has received criticisms on three aspects (Trochim, 2006). It has been criticized for being very difficult to implement since it requires several methods for measuring several traits while it is sometimes impossible due to the nature of the trait (e.g. difficult to measure weight by more than one method); it cannot define the degree of construct validity (e.g. cannot determine a score for measuring construct validity as coefficient alpha does for measuring reliability); and due to its judgmental nature, it is possible that different researchers would arrive at different conclusions. Alternatively, Trochim (2006) suggested multitrait matrix (MTM) to measure both convergent and discriminant validity, by reexamining these two types of validities. For items of a measure having convergent validity, he suggested high intercorrelations between these items to represent convergent validity; while for discriminant validity, measures for theoretically different constructs should not be highly correlated.

In this study, convergent and discriminant validities of the perceived occupation related organizational support (OPOS) scale is assessed with Trochim's (2006) multitrait matrix (MTM), rather than MTMM, since it was difficult to include another method for OPOS in an already long questionnaire. Table 3 presents the required correlations for convergent and discriminant validities of the OPOS items in the total sample of 360 participants from two occupations. Convergent validity is assessed by examining the intercorrelations between OPOS items. The test for

discriminant validity requires the comparison of OPOS with a theoretically different construct. For assessing discriminant validity, four items of continuance occupational commitment representing a conceptually different construct related to occupation are used. The continuance occupational commitment included the following four items for assessment of discriminant validity:

1. I have put too much into this profession to consider changing now.
2. Changing professions now would be difficult for me to do.
3. Too much of my life would be disrupted if I were to change my profession.
4. It would be costly for me to change my profession now.

The upper left rectangle in Table 3 represents the intercorrelations among the OPOS items. All items are significantly correlated at the .01 level, reflecting convergent validity. Similarly, the lower right rectangle in Table 3 shows the intercorrelations between continuance occupational commitment items, all of which are significant at .01 level. The lower left and upper right rectangles (with same values) in Table 3 show the intra-item correlations of the OPOS and continuance occupational commitment items. None of the OPOS items but one had significant correlations with continuance occupational commitment items. The significance level for the correlation between third OPOS item and the second continuance occupational commitment item was .05. Since all items but one reported .05 level of significance, it could be concluded that this correlation is low enough to give an insignificant result at the .01 level. Therefore, it could be concluded that the OPOS scale is also confirmed for discriminant validity.

Table 3 Pearson Correlations for Assessing the Construct Validity of OPOS Scale

	opos1	opos2	opos3	opos4	occc1	occc2	occc3	occc4
opos1	1	.726**	.796**	.620**	-.020	.098	.069	-.084
opos2	.726**	1	.706**	.632**	-.029	.061	.028	-.003
opos3	.796**	.706**	1	.627**	.037	.126*	.060	-.064
opos4	.620**	.632**	.627**	1	.019	.094	.059	.018
occc1	-.020	-.029	.037	.019	1	.639**	.553**	.379**
occc2	.098	.061	.126*	.094	.639**	1	.653**	.555**
occc3	.069	.028	.060	.059	.553**	.653**	1	.557**
occc4	-.084	-.003	-.064	.018	.379**	.555**	.557**	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

A factor analysis of the four items of OPOS scale yielded only one factor for the construct with principal components analysis, accounting for 76.44 % of variance, which is a fairly good level of explanation. The internal consistency of the scale measured by Cronbach's alpha is .896 and no deletion of items increased the reliability of the scale. The factor analysis results and reliability scores are presented in the sections following missing value analysis in Chapter 5.

CHAPTER V

FINDINGS

This section presents the missing value analysis prior to data reduction and analyses, reliability checks and factor analyses of the measures used in this study. These are followed by the regression results for hypotheses testing and analyses for the research questions.

Analyses of Missing Values

Before starting with the reliability checks and factor analyses, missing values in the data from total sample is examined. Hair and colleagues (2006) suggested a four step analysis of missing data regarding the type, extent, randomness of missing data and imputation methods (Hair, Black, Babin, Anderson, and Tatham, 2006). Investigating the patterns of missing data, it was concluded that most missing data in the sample was ignorable since very few responses were missing in different variables and cases. According to Hair et al. (2006), the threshold of missing data per observation was 10% of total items in an observation in a random pattern, for the case or observation being a candidate for deletion. Among the 181 observations of engineers, one respondent had more than 10% of missing data in a systematic pattern, which was not ignorable, so the case was deleted. Among the 185 participants from teachers, five cases had almost 10% of missing data in a not ignorable systematic pattern, i.e. the measure for one or more constructs was not filled in by the respondent, so those

five cases were also deleted. Deletion of cases left the sample with equal number of respondents from each occupation, 180, with a total sample size of 360. When the items in the questionnaire were examined for missing data, only one item in both occupations had missing data for nearly 10% of observed cases, so the variable was excluded from further analyses. The deleted item was “creativity” in the positive affect measure of PANAS. So, PANAS was left with 19 items, nine for measuring positive affect and ten for negative affect.

The rest of the missing values in data were diagnosed as missing completely at random (MCAR), since they did not follow any specific pattern, and far less than 10% of an observation. This type of missing data was replaced with the mean value of the relevant occupational group for each variable.

Before starting the reliability checks and factor analyses, the data was also detected for the outliers. Univariate analyses for the metric variables in the data presented no outlier cases for deletion.

Factor Analyses

Factor analyses have been conducted for all the study variables including the dimensions of citizenship behavior (helping, civic virtue and sportsmanship), organizational commitment (affective, continuance, normative), occupational commitment (affective, continuance, normative), perceived organizational support, work values, positive and negative affect, and perceived occupation related

organizational support for examining their factor structures prior to hypotheses testing.

Before conducting the factor analyses, all the items for the study measures were subjected to normality checks for meeting the normality assumption. Normality of items is assessed by computing the z values for skewness and kurtosis. The obtained values showed that most items were not normally distributed. Most of the nonnormal data was negatively skewed. Applying the potential data transformation techniques of taking the logarithm, inverse and square root of these items did not improve the assumption of normality. (Later, while testing for the hypotheses, the summated scales for the variables were subjected to normality checks for a second time.) So the factor analyses were carried out with the original data following Morgan, Leech, Gloeckner and Barrett (2004)'s statement on the normality assumption:

> Some parametric statistics have been found to be 'robust' to one or more of their assumptions. Robust means that the assumptions can be violated quite a lot without damaging the validity of the statistic. [...] Statisticians who have studied these statistics have found that even when data are not normally distributed, (e.g. skewed a lot), they can still be used under many circumstances (p.59).

In addition, Hair et al. (2006) mentioned that departures from the assumptions of normality, linearity and homoscedasticity applied only to the extent that they reduced the correlations of observed variables. Since the transformations of data did not work for normality also in terms of improving inter-item correlations for summated scales, the rest of the analyses were performed using original data with SPSS 17. The general procedure for conducting factor analyses and evaluating the results is explained in the following paragraphs.

The factor analyses for the measures used in this study are carried out using principal components analysis with varimax rotation. No rotation was performed when all items of a measure loaded on one factor. To check for the appropriateness of measures for factor analysis, the amount of necessary intercorrelations between the items of a measure is assessed by Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The KMO scores close to 1 (and not less than .50) indicated the appropriateness of a measure for factor analysis. All of the scales used in this study satisfied the necessary conditions in terms of KMO scores. In addition, KMO scores are also compared to the figures in the diagonal of anti-image correlations to investigate if there are scores largely smaller than the KMO score and the measures used in this study did not have such scores. Significant Bartlett's test of sphericity states the presence of sufficient correlations in a scale for factor analysis, which was also satisfied for all the measures. The factor loadings are obtained with varimax rotation in order to assure that the items load on one factor. Before achieving the final factor structure, necessary items were deleted due to complex structures, with factor loadings of .30 or loading highly on more than one factor. Hair et al. (2006) suggested the conservative minimum level of a factor loading for a sample size of 350 as .30.

The factor analysis results for OCB items are displayed in Table 4. The twelve items of thirteen items accounted for 61.19% of the variance in OCB. One item was deleted due to high loadings on more than one factor. The deleted item was "I encourage others when they are down". Six of the twelve items loaded on helping, three items loaded on civic virtue and the remaining three items loaded on sportsmanship behaviors, consistent with the findings in earlier research (Podsakoff

et al., 1997). The reliability scores were .85 for helping, .69 for civic virtue, and .70 for sportsmanship behaviors.

Table 4 Factor Analysis Results for Organizational Citizenship Behaviors

	Factors		
Items	Helping	Civic Virtue	Sportsmanship
I willingly give of my time to help others who have work related problems	.762		
I try to act like a peacemaker when others have disagreements	.755		
I willingly share my expertise with others	.747		
I help out others who fall behind in their work	.726		
I take steps to try to prevent problems with coworkers	.721		
I 'touch base' with others before initiating actions that might affect them	.529		
I'm willing to risk disapproval to express my beliefs about what's best for		.860	
I provide constructive suggestions about how others can improve their effectiveness		.661	
I attend and actively participate in meetings		.598	
I consume a lot of time complaining about trivial matters (R)			.822
I always focus on what is wrong with our situation, rather than the positive side (R)			.756
I always find fault with what others are doing (R)			.756
Variance explained (%)		61.158	
KMO Measure of sampling adequacy		.871	
Bartlett's test of sphericity (sig.)		.000	

Separate factor analyses have been performed for each dimension of organizational and occupational commitments, since they are stated to be theoretically distinct constructs (Meyer et al., 1993).

The factor analysis results for affective organizational commitment items are provided in Table 5. The six items explained 60.46% of the variance in affective commitment to the organization. The reliability score for this scale was .87.

Table 5 Factor Analysis Results for Affective Organizational Commitment Items

Items	Loadings
I do not feel 'emotionally attached' to this organization (R)	.825
I do not feel like 'a part of the family' in this organization (R)	.790
This organization has a great deal of personal meaning to me	.767
I do not feel a strong sense of 'belonging' to this organization (R)	.763
I would be very happy to spend the rest of my career with this organization	.762
I really feel as if this organization's problems are my own	.757
Variance explained (%)	60.456
KMO Measure of sampling adequacy	.843
Bartlett's test of sphericity (sig.)	.000

The factor analysis results for continuance organizational commitment items are displayed in Table 6. Four of the six items accounted for 60.40% of the variance in continuance commitment to the organization. Two items of "If I had not already put too much of myself into this organization, I might consider working elsewhere" and "One of the few negative consequences of leaving this organization would be the scarcity of available alternatives" were deleted due to low communalities. The reliability score for this scale was .77.

Table 6 Factor Analysis Results for Continuance Organizational Commitment Items

Items	Loadings
It would be very hard for me to leave my orrganization right now, even if I wanted to	.856
Too much of my life would be disrupted if I decided I wanted to leave my organization now	.839
Right now, staying with my organization is a matter of necessity as much as a desire	.770
I feel I have too few options to consider leaving this organization	.621
Variance explained (%)	60.402
KMO Measure of sampling adequacy	.702
Bartlett's test of sphericity (sig.)	.000

Factor analysis results for normative organizational commitment items are shown in Table 7. Four of the six items explained 64.06% of the variance in normative

commitment to the organization. Two items including “I do not feel any obligation to remain with my current employer” and “Even if it were to my advantage, I do not feel it would be right to leave my organization now” were deleted to refine the scale due to low communalities. The Cronbach’s alpha for this scale was .81.

Table 7 Factor Analysis Results for Normative Organizational Commitment Items

Items	Loadings
I would not leave my organization right now because I have a sense of obligation to the people in it	.844
This organization deserves my loyalty	.814
I owe a great deal to my organization	.788
I would feel guilty if I left my organization now	.753
Variance explained (%)	64.056
KMO Measure of sampling adequacy	.765
Bartlett's test of sphericity (sig.)	.000

The factor analysis results for affective occupational commitment measure are presented in Table 8. Five items out of six accounted for 61.60% of the variance in affective commitment to the occupation. One item, “My occupation is very important to my self-image” was deleted due to low communality. The reliability score for this scale was .83.

Table 8 Factor Analysis Results for Affective Occupational Commitment Items

Items	Loadings
I regret having entered this profession (R)	.847
I am enthusiastic about this profession	.821
I am proud to be in this profession	.814
I do not identify with this profession (R)	.765
I dislike being a (name of occupation) (R)	.665
Variance explained (%)	61.600
KMO Measure of sampling adequacy	.812
Bartlett's test of sphericity (sig.)	.000

Factor analysis results for continuance occupational commitment items are displayed in Table 9. Five out of six items explained 65.81% of the variance in continuance commitment to the occupation. The item, “There are no pressures to keep me from changing professions”, was deleted due to low communality. The reliability score for this scale was .87.

Table 9 Factor Analysis Results for Continuance Occupational Commitment Items

Items	Loadings
Changing professions now would be difficult for me to do	.862
Too much of my life would be disrupted if I were to change my profession	.842
Changing professions now would require considerable personal sacrifice	.834
It would be costly for me to change my profession now	.758
I have put too much into this profession to consider changing now	.754
Variance explained (%)	65.810
KMO Measure of sampling adequacy	.852
Bartlett's test of sphericity (sig.)	.000

The results of factor analysis normative occupational commitment items are displayed in Table 10. Four of the six items explained 60.76% of the variance in normative commitment to the occupation. Two items of “I do not feel any obligation

to remain in this profession" and "Even if it were to my advantage, I do not feel that it would be right to leave this profession now" were deleted due to low communalities. The reliability score for this scale was .78.

Table 10 Factor Analysis Results for Normative Occupational Commitment Items

Items	Loadings
I am in this profession because of a sense of loyalty to it	.828
I feel a responsibility to this profession to continue in it	.825
I would feel guilty if I left this profession	.777
I believe people who have been trained in a profession have a responsibility to stay in that profession for a reasonable period of time	.678
Variance explained (%)	60.757
KMO Measure of sampling adequacy	.736
Bartlett's test of sphericity (sig.)	.000

Results of factor analysis perceived organizational support items are shown in Table 11. Eight items accounted for 57.57% of the variance in perceptions of organizational support. The reliability score for this scale was .89.

Table 11 Factor Analysis Results for Perceived Organizational Support (POS) Items

Items	Loadings
My organization is willing to help me when I need a special favor	.861
My organization really cares about my well-being	.837
Help is available from my organization when I have a problem	.819
My organization strongly considers my goals and values	.809
My organization cares about my opinions	.776
My organization shows very little concern for me	.705
If given opportunity, my organization would take advantage of me	.660
My organization would forgive an honest mistake on my part	.550
Variance explained (%)	57.569
KMO Measure of sampling adequacy	.895
Bartlett's test of sphericity (sig.)	.000

The factor analysis results for the items of the new construct of perceived occupation related organizational support (OPOS) are presented in Table 12. The variance explained by the one factor resulting from the factor analysis was 76.44%. The factor loadings, which could be followed in Table 12 for OPOS items, were sufficiently high, with a minimum of .815, which far exceeds the conservative limit of .30 for samples larger than 350 (Hair et al., 2006).

Table 12 Factor Analysis Results for OPOS Items

Items	Loadings
My organization strongly considers my occupational advancement	.903
Help is available from my organization when I have occupation related problems	.877
My organization is willing to help me when I need special training for an occupational issue	.899
My organization acknowledges my expertise in my occupation	.815
Variance explained (%)	76.440
KMO Measure of sampling adequacy	.829
Bartlett's test of sphericity (sig.)	.000

Factor analysis results for the items of work values construct are displayed in Table 13. Before achieving the final factor structure, four of the twenty-four work values items, in successive factor analyses, were deleted due to complex structures, with factor loadings of .30 or more than one factor. These items are independence, influence at work, recognition for performance and advancement. Five factors emerged for the remaining twenty items of work values. These factors are named as involvement, prestige, accomplishment, social and material work values. Five factors accounted for 64.97 % of the variance in work values.

Table 13 Factor Analysis Results for Work Values

Items	Factors				
	Involvement	Prestige	Accomplishment	Social	Material
Job responsibility	.751				
Influence in the organization	.711				
Work feedback	.698				
Meaningful work	.566				
Contribution to society	.559				
Job security		.783			
Good company to work for		.729			
Job status		.634			
Self esteem		.581			
Work conditions		.570			
Personal growth			.735		
Use of abilities			.719		
Job interest			.671		
Achievement			.592		
Fair supervisor			.554		
Coworkers				.738	
Work hours				.583	
Interaction with people				.535	
Pay					.864
Benefits					.553
Variance explained (%)	64.968				
KMO Measure of sampling adequacy	.904				
Bartlett's test of sphericity (sig.)	.000				

Five of the twenty items, job responsibility, influence in the organization, work feedback, meaningful work and contribution to society loaded on involvement values. These values are conceptualized as values related to taking part and showing presence in compliance with the norms of the societal life. The five items that loaded on the prestige values are self-esteem, job security, job status, good company to work for and work conditions. Prestige work values are likely to be related to the position one holds in the work life. Accomplishment related work values include job interest, fair supervisor, use of abilities, personal growth and achievement. They pertain to the cognitive evaluations of self-realization. Coworkers, interaction with people and

convenient hours load on social work values, implying the social relations at work with convenient hours facilitating such relations. The last set of work values consists of pay and benefits, accounting for the material aspect of work values. The first three factors, involvement, prestige and accomplishment overlap with Elizur et al.'s (1991) classification of intrinsic or cognitive work values, factors named social and material work values overlap with affective/social and instrumental/extrinsic/material classifications. Involvement, prestige, accomplishment, social and material work values scales had coefficient alpha scores of .81, .85, .78, .67 and .61 respectively.

The factor analysis results for the nine items of the construct dispositional positive affect (PA) are shown in Table 14. The variance explained by the one factor resulting from the factor analysis was 53.81%. Cronbach's alpha for positive affect was .89. The results of factor analysis for the ten items of negative affect (NA) as displayed in Table 15 yielded two factors for the construct which accounted for the 60.07% of the variance in NA. The first factor consisted of five-items including scared, nervous, distressed, jittery and upset. These items pertain to one's negative orientations in himself or herself, irrelevant with any object necessary to induce such feelings and named as internal negative affect (NA-I). The remaining five items including ashamed, irritable, hostile, guilty and afraid are feelings that are likely to come out of the interactions of individuals with others and named as others oriented or social negative affect (NA-O). Cronbach's alphas for NA-I and NA-O were .83 and .78, respectively.

Table 14 Factor Analysis Results for Positive Affect

Items	Loadings
Active	.820
Enthusiastic	.798
Excited	.772
Alert	.764
Interested	.760
Strong	.748
Determined	.710
Careful	.682
Proud	.498
Variance explained (%)	53.805
KMO Measure of sampling adequacy	.895
Bartlett's test of sphericity (sig.)	.000

Table 15 Factor Analysis Results for Negative Affect

	Factors	
Items	NA (I)	NA (O)
Nervous	.839	
Distressed	.791	
Jittery	.698	
Scared	.652	
Upset	.596	
Guilty		.855
Hostile		.764
Afraid		.761
Ashamed		.595
Irritable		.584
Variance explained (%)	60.069	
KMO Measure of sampling adequacy	.880	
Bartlett's test of sphericity (sig.)	.000	

All of the items for related measures were used to calculate the summated scales to represent the constructs in the study and employed for further examination of data, including the calculation of summary statistics, correlations and regression analyses.

Testing for Reliability

Reliabilities or internal consistencies of the variables in the study are calculated by the Cronbach's alphas for each scale in the data from the total sample of 360 participants. All of the variables included in the analyses had reliability scores above the generally accepted lower limit of .60. Since most of the scales were widely validated and used in the literature and deletion of any items taking reliability scores as reference point did not propose very good levels of improvement, no more items were deleted after performing reliability checks. The procedure for deletion of relevant items is explained in detail in the next section. The reliability scores for the scales are presented in the diagonal of Table 17.

Descriptive Statistics of and Correlations among the Study Variables

Means, standard deviations (SD), range, maximum and minimum values for the study variables are presented in Table 16. All study variables were measured in 7-point Likert type scales, with lower scores representing the negative vs. higher scores representing positive reactions. The missing values of the scale variables, excluding the demographics of the study was replaced with the means of related occupations after the essential deletions of cases.

The mean values of all three types of citizenship behaviors, all above the mid-point (4) of the scales, indicated that both engineers and teachers are likely engage in behaviors of helping (5.913), civic virtue (5.910) and sportsmanship (5.008). Higher

mean scores for helping others and civic virtue behavior of being concerned with the organization distinguishes such behaviors from sportsmanship behaviors like complaining about less than ideal situations in the organization.

Among the organizational commitment dimensions, affective component (5.179) scored the highest compared to continuance (4.216) and normative (4.526). The respondents of the two occupations were almost indifferent in terms of going on their careers in the current organization and having a sense of loyalty toward the organization. On the other hand, they were rather affectively attached to the place they worked. Commitment to occupation also worked in a similar pattern, respondents from two occupations placed higher importance on the affective attachment (5.556) to their occupations than continuance (4.820) and normative (4.708) commitments.

Perceived organizational support (5.139) and perceived occupation related organizational support (5.268) also had mean values above the mid-point of the scale, showing that both engineers and teachers valued the feelings of support received from their organizations and they valued such support even more if it is related to their occupational advancements.

Work values related to involvement (6.261), prestige (6.413), accomplishment (6.587), social relations (6.314) and material aspects (6.196) all displayed high mean scores pointing to their importance in people's work lives. In addition, dispositional positive affect (5.223), internal negative affect (3.014) and negative affect towards others (1.966) had above and below average mean scores respectively. People were more likely to hold positive feelings and less likely to hold negative ones.

Table 16 Descriptive Statistics for Study Variables

	N	Range	Minimum	Maximum	Mean	SD
Helping behaviors	360	4.67	2.33	7.00	5.913	.733
Civic virtue behaviors	360	5.00	2.00	7.00	5.910	.817
Sportsmanship behaviors	360	6.00	1.00	7.00	5.008	1.275
Affective organizational commitment	360	6.00	1.00	7.00	5.179	1.277
Continuance organizational commitment	360	6.00	1.00	7.00	4.216	1.315
Normative organizational commitment	360	6.00	1.00	7.00	4.526	1.344
Affective occupational commitment	360	6.00	1.00	7.00	5.556	1.241
Continuance occupational commitment	360	5.33	1.00	6.33	4.820	1.381
Normative occupational commitment	360	6.00	1.00	7.00	4.708	1.342
Perceived organizational support (POS)	360	5.63	1.38	7.00	5.139	1.075
Occupation related POS	360	6.00	1.00	7.00	5.268	1.201
Involvement work values	360	6.00	1.00	7.00	6.261	.654
Prestige work values	360	3.00	4.00	7.00	6.413	.599
Accomplishment work values	360	3.60	3.40	7.00	6.587	.452
Social work values	360	4.00	3.00	7.00	6.314	.646
Material work values	360	5.00	2.00	7.00	6.196	.792
Positive affect	360	5.56	1.44	7.00	5.223	.789
Negative affect (I)	360	6.00	1.00	7.00	3.014	.963
Negative affect (O)	360	5.60	1.00	6.60	1.966	.861
Age*	304	6.00	2.00	8.00	4.000	1.580
Gender**	346	1.00	1.00	2.00	2.000	.495
Work experience (no. of years)	306	39.50	.50	40.00	10.382	7.559
Monthly salary*	290	5.00	2.00	7.00	3.000	1.156

* Median is reported for age and monthly salary.

** Mode is reported for gender composition.

Age of the participants was asked in intervals. The scaling for age was asked in levels covering: 1=less than 20, 2=21-25, 3=26-30, 4=31-35, 5=36-40, 6=41-45, 7=45-50 and 8=more than 50. The median age reported was 4.000, for 304 respondents, corresponding to the level of 31-35. Gender was coded as 1=male and 2=female. Mode (2.000) is reported for gender information of 346 participants. The gender composition of the sample was 199 females (57.5%) vs. 147 males (42.5%). Full-time work experience was asked in number of years and the responses ranged from six months to 40 years, with the mean of 10.4 years. Finally, the monthly salary

was also asked in intervals (for the intervals, please refer to the questionnaires in Appendix A and/or B). The median monthly salary (3.000) of the participants corresponds to the range of 1,000-2,000 TL.

Correlations between the study variables are reported in Table 17. Reliability scores for the summated scales, measured in Cronbach's alpha, are reported along the diagonal in parentheses.

The first dependent variable, helping behavior, had significant correlations with the attitudes of affective ($r=.348$, $p<.01$) and normative ($r=.328$, $p<.01$) organizational commitments, affective ($r=.313$, $p<.01$) and normative ($r=.312$, $p<.01$) occupational commitments, perceived organizational support ($r=.307$, $p<.01$), perceived occupation related organizational support ($r=.347$, $p<.01$), involvement work values ($r=.372$, $p<.01$), prestige work values ($r=.292$, $p<.01$), accomplishment work values ($r=.338$, $p<.01$), social work values ($r=.293$, $p<.01$), material work values ($r=.125$, $p<.05$), positive affect ($r=.463$, $p<.01$), internal negative affect ($r=-.155$, $p<.01$) and negative affect towards others ($r=-.169$, $p<.01$). Engineers and teachers reported that voluntary behaviors of helping in the organization are likely to be influenced by contextual factors like affective attachment and loyalty to the organization and occupation as well as perceptions of general and occupation related support from the organization. In addition, dispositional factors, including work values and affect appear to be significantly related to the behaviors of helping others. People with a more positive outlook are inclined to help others; while a negative outlook, both internal and others-related, limits the experience of such behaviors.

Civic virtue behavior of OCB, as the second dependent variable, was significantly correlated with affective ($r=.412$, $p<.01$) and normative ($r=.322$, $p<.01$)

organizational commitments, affective (r=.352, p<.01) and normative (r=.263, p<.01) occupational commitments, perceived organizational support (r=.348, p<.01), perceived occupation related organizational support (r=.337, p<.01), involvement work values (r=.489, p<.01), prestige work values (r=.333, p<.01), accomplishment work values (r=.413, p<.01), social work values (r=.254, p<.01), material work values (r=.271, p<.01), positive affect (r=.454, p<.01), internal negative affect (r=-.193, p<.01) and negative affect towards others (r=-.208, p<.01). Engineers and teachers are more likely to engage in behaviors pertaining to a macro-level concern in the organization when they are more affectively attached and loyal to their organizations and occupations, and hold perceptions that organizations value their well-being and occupational advancement. Moreover, people who have general positive feelings and less negative feelings are more likely to participate in organization related activities. Instrumental, affective and cognitive work values also play a significant role in the experience of civic virtue behaviors.

Continuance organizational and occupational commitments had very weak and insignificant correlations between helping and civic virtue behaviors. Results indicate that neither teachers, nor engineers are inclined to display helping and civic virtue behaviors due to feelings of obligation to stay in the organization and occupation.

The last dependent variable, sportsmanship behaviors, had significant correlations with affective (r=.284, p<.01), continuance (r=-.097, p<.01) and normative (r=.143; p<.01) organizational commitment, affective occupational commitment (r=.217, p<.01), perceived organizational support (r=.309, p<.01), perceived occupation related organizational support (r=.267, p<.01), involvement work values (r=.172, p<.01), prestige work values (r=.216, p<.01), accomplishment

work values (r=.261, p<.01), social work values (r=.159, p<.01), positive affect (r=.173, p<.01), internal negative affect (r=-.402, p<.01) and negative affect toward others (r=-.381, p<.01). The correlations between continuance and normative occupational commitments as well as work values that are material in nature and sportsmanship behaviors were very weak and insignificant. Correlations state that continuance organizational commitment was only significantly correlated with sportsmanship behaviors in a negative way. Results indicate that affective attachment to the organization and occupation, loyalty to and obligation to remain in the organization and the perceptions of general and occupation related support from the organization are likely to affect people to behave in a "sportsman" way. Work values, with the exclusion of material/instrumental ones, also appear as having an influence in the experience of such behaviors. In addition, people with positive feelings have a tendency to behave in a "sportsman" way, while a general and other related negative outlook is likely to increase complaints about less than ideal situations in the organizations.

Continuance occupational commitment was not correlated with any of the dependent variables, and is not included in any of the regression analyses for hypotheses testing and was only employed in validation of OPOS measure.

Table 17 Pearson Correlations between the Study Variables***(N=360)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
helping (1)	(.85)																		
civic virtue (2)	.657**	(.69)																	
sportsmanship (3)	.178**	.215**	(.70)																
aff. org. comm. (4)	.348**	.412**	.284**	(.87)															
cont. org. comm. (5)	.073	.055	-.097**	.238**	(.77)														
norm. org. comm. (6)	.328**	.322**	.143**	.633**	.365**	(.81)													
aff. occ. comm. (7)	.313**	.352**	.217**	.468**	.051	.383**	(.83)												
cont. occ. comm. (8)	.025	.024	-.062	.051	.428**	.131*	-.048	(.87)											
norm.occ. comm. (9)	.312**	.263**	.076	.436**	.299**	.585**	.508**	.270**	(.78)										
pos (10)	.307**	.348**	.309**	.653**	.166**	.647**	.459**	.009	.413**	(.89)									
opos (11)	.347**	.337**	.267**	.539**	.247**	.546**	.340**	.052	.365**	.770**	(.90)								
involvement w.v. (12)	.372**	.489**	.172**	.312**	.029	.246**	.293**	.006	.298**	.229**	.184**	(.81)							
prestige w.v. (13)	.292**	.333**	.216**	.297**	.147**	.288**	.247**	.055	.312**	.248**	.261**	.635**	(.85)						
accomplishment w.v. (14)	.338**	.413**	.261**	.266**	-.025	.219**	.281**	.042	.280**	.254**	.257**	.612**	.587**	(.78)					
social w.v. (15)	.293**	.254**	.159**	.108*	.030	.167**	.094	-.017	.165**	.098	.153**	.504**	.637**	.475**	(.67)				
material w.v. (16)	.125*	.271**	.018	.079	.017	.023	.108*	.017	.061	.060	.104*	.424**	.457**	.339**	.431**	(.61)			
positive affect (17)	.463**	.454**	.173**	.406**	.030	.288**	.363**	-.042	.281**	.346**	.303**	.426**	.423**	.385**	.272**	.163**	(.89)		
negative affect (i) (18)	-.155**	-.193**	-.402**	-.221**	.124*	-.091	-267.**	.124*	.002	-.255**	-.212**	-.044	-.021	-.129*	-.066	-.052	-.190**	(.83)	
negative affect (o) (19)	-.169**	-.208**	-.381**	-.219**	.157**	-.055	-.243**	.039	-.012	-.231**	-.186**	-.114*	-.123*	-.260**	-.124*	-.077	-.179**	.648**	(.78)

* p<.05, two-tailed. ** p<.01, two-tailed.

*** Cronbach's alphas are presented in parantheses on the diagonal.

Testing of Hypotheses

This section details the regression analyses performed for testing the hypotheses of the study. Hypotheses 1 and 2 are tested first with regression analyses to look for the mediation of organizational and occupational commitments between perceived organizational support, perceived occupation related organizational support and citizenship behaviors of helping and civic virtue. Next, regression analyses for the test of hypotheses (Hypothesis 3) relating work values and three forms of citizenship behaviors are presented. These are followed by the tests of hypotheses (Hypothesis 4) relating positive and negative affect and three types of citizenship behaviors. The first research question, asking for the moderation of occupation between contextual and dispositional antecedents and citizenship behaviors, is tested with moderated hierarchical multiple regressions. Finally, the second research question, investigating the simultaneous effects of contextual and dispositional antecedents of the three types of citizenship behaviors, is tested by performing stepwise regression analyses for each of the dependent variables.

The general procedure followed in the regression analyses is discussed in the following paragraphs.

The assumptions of linearity of the variate, homoscedasticity, normality of the error terms and independence of the error terms are tested with several procedures for all multiple regression analysis. The linearity of the variate is explored by null plot displaying the patterns of standardized residuals vs. predicted values, as well as partial regression plots showing unique relationships between dependent and independent variables. The plots do not point to any nonlinear

patterns of residuals for the variate nor for the independent variables. Homoscedasticity, implying equality of variances of error terms, is assessed through null plots of residuals vs. predicted values. No specific patterns in residuals are detected. The normality of error terms is explored with normal probability plots, comparing standardized residuals with the normal distribution and histograms of residuals. Normal probability plots did not present any systematic departures from the normal distribution, in line with histograms showing the normality of error terms. For the assumption of independence of error terms, Durbin-Watson statistic is examined. Although this test statistic is generally useful in checking for autocorrelation in time series data, it is reported in the tables for regression analyses. A very simple rule for this statistic is testing if the value obtained from the regression analysis is equal to or less than 2, which suggests independence of error terms. More accurate way to assess the independence of error terms is to compare Durbin-Watson value with its critical values in the table prepared for this statistic. The critical values expressed in terms of upper and lower limits of Durbin-Watson statistic for observations up to 2000 are presented on the Website of Stanford University (2006). When the values obtained in this study is compared to the upper and lower limits for the Durbin-Watson statistic in the table, most of the values from the study imply the independence of error terms, while a few either do not support the independence of error terms or lead to inconclusive results. The results from the table are not presented in this study due to the lack of published work on the table.

The model fits of the regression analyses, which test the significance of coefficient of determinations (R^2), are examined checking for significance of F values reported in the ANOVA table. All the analyses have significant F values, implying the significance of R^2s or variations explained.

Multicollinearity is assessed by checking the variance inflation factors (VIFs) and condition indices. Hair et al. (2006) suggest VIFs below 10 and condition indices below 30 for the non-presence of multicollinearity. Regression results for this study confirm these conditions to conclude with no multicollinearity.

The values of R^2 and adjusted R^2 are also compared for assessing if the model is over-fitted to the sample. Smaller adjusted R^2 values than original R^2 values indicate that the model has adequate observations to variables in the variate (Hair et al., 2006). All reported actual R^2 values exceed the adjusted R^2 values in this study.

Testing the Relationships of Contextual Antecedents and Organizational Citizenship Behaviors

Hypotheses 1 and 2 investigate a possible mediating effect of commitment (organizational and occupational) between perceptions of support (POS and OPOS) and OCBs (helping and civic virtue). Such effects are presented in detail in the following paragraphs, with the focus on the parts of Hypotheses 1 (a, b, c, d) and 2 (a, b, c, d).

To test for mediation, the three step regression approach recommended by Baron and Kenny (1986) is followed. First, the dependent variable is regressed on the independent variable. Second, the proposed mediator is regressed on the independent variable. In the final equation, the dependent variable is simultaneously regressed on the independent and mediating variable. Baron and Kenny (1986) state that full mediation exists when the first and second regressions are significant, and the effect

of the independent variable disappears with the significant effect of the mediator on the dependent variable in the third equation.

Hypotheses 1a and 1b investigate the mediating effect of organizational commitment (affective-1a, normative-1b) between perceived organizational support (POS) and citizenship behaviors of helping. The results of separate regression analysis for each dependent variable are displayed in Table 18. To test for H1a (Affective organizational commitment mediates the relationship between POS and helping behaviors), helping behavior is first regressed on perceived organizational support (Regression 1, Table 18). POS appears as a significant predictor of helping behavior (R^2=.094, F=37.136, p<.001). Affective organizational commitment is then regressed on POS (Regression 2, Table 18), which is also significant (R^2=.426, F=265.534, p<.001). In the final regression (Regression 3, Table 18) to test for the mediation, helping behavior is regressed on affective organizational commitment, after controlling for POS (Regression 3, Step 1, Table 18). As seen in Table 18 (Regression 3, Step 2), the last regression is also significant (R^2=.132, F=27.199, p<.001), but B coefficient for POS (B=.094, p<.05) also remains significant with a lower value compared to its unique effect on helping behavior. These results show that full mediation of affective organizational commitment does not exist between POS and helping behaviors and H1a is not supported. The results point to the mutually exclusive importance of both support perceptions from organization and affective attachment to the organization in exhibiting helping behaviors.

For testing H1b, (Normative organizational commitment mediates the relationship between POS and helping behaviors) a similar procedure is followed. Helping behavior has already been regressed on perceived organizational support (Regression 1, Table 18), reported in the last paragraph. POS is a significant

predictor of helping behavior (R^2=.094, F=37.136, p<.001). Normative organizational commitment is then regressed on POS (Regression 4, Table 18), which is also significant (R^2=.418, F=257.223, p<.001). In the regression to test for the mediation (Regression 5, Table 18), helping behavior is regressed on normative organizational commitment, controlling for POS (Regression 5, Step 1, Table 18). The final regression (Regression 5, Step 2, Table 18) is also significant (R^2=.123, F=25.068, p<.001), with the B coefficient for POS (B=.110, p<.05) significant with a lower value compared to its unique effect (B=.209, p<.001) on helping behavior. The results show that full mediation of normative organizational commitment does not exist between POS and helping behaviors and H1b is not supported. The data from engineers and teachers point to the importance of both perceptions of support from the organization and loyalty to the organization in helping behaviors.

Hypotheses 1c and 1d investigate the mediating effect of organizational commitment (affective-1c, normative-1d) between perceived organizational support (POS) and civic virtue behaviors. To test for H1c (Affective organizational commitment mediates the relationship between POS and civic virtue behaviors), civic virtue behavior is first regressed on perceived organizational support (Regression 1, Table 19). POS (B=.265, p<.001) appears as a significant predictor of civic virtue behavior (R^2=.121, F=49.462, p<.001). Affective organizational commitment is then regressed on POS (Regression 2, Table 19), which is also significant (R^2=.426, F=265.534, p<.001). In the regression to test for the mediation (Regression 3, Table 19), civic virtue behavior is regressed on affective organizational commitment, controlling for POS (Regression 3, Step 2, Table 19). The resulting regression is also significant (R^2=.181, F=39.447, p<.001).

Table18 Hierarchical Mediated Regression Results for POS, Organizational Commitment and Helping Behavior

				Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF	Durbin-Watson
Regression	Step	Dependent Variable	Independent Variable(s)*	β	SE	β	t	Sig.								
1		Helping behavior	POS	.209	.034	.307	6.094	.000	.094	.091	_	37.13636	.000	_	_	2.049
			(Constant)	4.839	.180		26.867	.000								
2		Affective organizational commitment	POS	.775	.048	.653	16.295	.000	.426	.424	_	265.534	.000	_	_	1.939
			(Constant)	1.196	.250		4.791	.000								
3	1	Helping behavior	POS	.094	.044	.138	2.123	.034	.094	.091	_	37.13636	.000	_	_	
	2		Affective Organizational Commitment	.148	.037	.258	3.966	.000	.132	.127	.038	27.199	.000	15.733	.000	2.070
			(Constant)	4.661	.182		25.602	.000								
4		Normative organizational commitment	POS	.808	.050	.647	16.038	.000	.418	.416	_	257.223	.000	_	_	1.717
			(Constant)	.372	.265		1.404	.161								
5	1	Helping behavior	POS	.110	.044	.162	2.491	.013	.094	.091	_	37.136	.000	_	_	
	2		Normative Organizational Commitment	.122	.035	.224	3.445	.001	.123	.118	.029	25.068	.000	11.871	.001	1.999
			(Constant)	4.793	.178		26.942	.000								

*Constants in regressions are reported.

The B coefficient for POS (B=.105, p<.05) has a significant but lower value compared to its unique effect (B=.265, p<.001) on civic virtue behavior. These results let us conclude that full mediation of affective organizational commitment does not exist between POS and civic virtue behaviors, thus, H1c is not supported. Perceptions of support from and affective attachment to the organization perhaps contribute independently to explain civic virtue behaviors.

H1d (Normative organizational commitment mediates the relationship between POS and civic virtue behaviors) is tested in a similar way. Civic virtue behavior has already been regressed on perceived organizational support (see Regression 1, Table 19), reported in the last paragraph. POS (B=.265, p<.001) appears as a significant predictor of civic virtue behavior (R^2=.121, F=49.462, p<.001). Next, normative organizational commitment is regressed on POS (Regression 4, Table 19), which is also significant (R^2=.365, F=205.641, p<.001). In the regression to test for the mediation (Regression 5, Table 19), civic virtue behavior is regressed on normative organizational commitment, controlling for POS (Regression 5, Step 1, Table 19). As seen in Step 2 of Regression 5 in Table 19, the outcoming regression is also significant (R^2=.137, F=28.453, p<.001), with the B coefficient for POS (B=.183, p<.001) significant but lower value compared to its unique effect (B=.265, p<.001) on civic virtue behavior. The results show that full mediation of normative organizational commitment does not exist between POS and civic virtue behaviors and H1d is not supported.

Table 19 Hierarchical Mediated Regression Results for POS, Organizational Commitment and Civic Virtue Behavior

				Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF	Durbin-Watson
Regression	Step	Dependent Variable	Independent Variable(s)*	β	SE	β	t	Sig.								
1		Civic virtue behavior	POS	.265	.038	.348	7.033	.000	.121	.119	_	49.462	.000	_	_	1.811
			(Constant)	4.549	.198		23.015	.000								
2		Affective organizational commitment	POS	.775	.048	.653	16.295	.000	.426	.424	_	265.534	.000	_	_	1.939
			(Constant)	1.196	.250		4.791	.000								
3	1	Civic virtue behavior	POS	.105	.048	.138	2.185	.030	.121	.119	_	49.462	.000	_	_	_
	2		Affective Organizational Commitment	.206	.040	.322	5.097	.000	.181	.176	.060	39.447	.000	25.981	.000	1.848
			(Constant)	4.302	.197	_	21.825	.000								
4		Normative organizational commitment	POS	.654	.046	.604	14.340	.000	.365	.363	_	205.641	.000	_	_	1.673
			(Constant)	1.237	.240		5.164	.000								
5	1	Civic virtue behavior	POS	.183	.049	.241	3.738	.000	.121	.119	_	49.462	.000	_	_	
	2		Normative Organizational Commitment	.101	.039	.166	2.581	.010	.137	.133	.016	28.453	.010	6.663	.000	1.792
			(Constant)	4.511	.197		22.942	.000								

*Constants in regressions are reported.

Hypotheses 2a and 2b investigate the mediating effect of occupational commitment (affective-2a, normative-2b) between perceptions of occupation related organizational support (OPOS) and helping behaviors. The results of these tests are presented in Table 20.

To test for H2a (Affective occupational commitment mediates the relationship between OPOS and helping behaviors), helping behavior is first regressed on OPOS (Regression 1, Table 20). OPOS comes out as a significant predictor of helping behavior (R^2=.120, F=48.891, p<.001). Affective occupational commitment is then regressed on OPOS (Regression 2, Table 20) next, which is also significant (R^2=.115, F=46.734, p<.001). In the final regression (Regression 3, Table 20) to test for the mediation, helping behavior is regressed on affective occupational commitment, controlling for OPOS (Regression 3, Step 1, Table 20). As can be seen in Regression 3, Step 2 in table 20, this last regression for mediation is also significant (R^2=.163, F=34.798, p<.001), but B coefficient for OPOS (B=.164, p<.001) remains significant with a lower value compared to its unique effect (B=.212, p<.001) on helping behavior. These results illustrate that affective attachment to occupation does not fully mediate the relationship between perceptions of occupation related support from the organization and helping behaviors, hence H2a is not supported.

H2b (Normative occupational commitment mediates the relationship between OPOS and helping behaviors) is investigated following a similar procedure. Helping behavior has already been regressed on OPOS (see Regression 1, Table 20) and was reported in the last paragraph. Normative occupational commitment is next regressed on OPOS (Regression 4, Table 20), which is also significant (R^2=.133, F=54.966, p<.001). In the last regression to test for the mediation (Regression 5, Table 20),

helping behavior is regressed on normative occupational commitment, while controlling for OPOS (Regression 5, Step 1, Table 20). The outcoming regression is also significant (R^2=.160, F=34.012, p<.001), with the B coefficient for OPOS (B=.164, p<.001) significant but lower value when compared with its unique effect (B=.212, p<.001) on helping behavior. The results indicate that loyalty to the occupation does not fully mediate the relationship between OPOS and helping behaviors, hence H2b does not receive support.

Hypotheses 2c and 2d look into the mediating effect of occupational commitment (affective-2c, normative-2d) between perceptions of occupation related organizational support (OPOS) and civic virtue behaviors. The regression results for mediation are presented in Table 21.

In order to test for H2c (Affective occupational commitment mediates the relationship between OPOS and civic virtue behaviors), civic virtue behavior is first regressed on OPOS (Regression 1, Table 21). OPOS (B=.230, p<.001) comes out as a significant predictor of civic virtue behaviors (R^2=.114, F=45.988, p<.001). Affective occupational commitment is next regressed on OPOS (Regression 2, Table 21), which is also significant (R^2=.115, F=46.734, p<.001). In the regression to test for the mediation effect (Regression 3, Table 21), civic virtue behavior is regressed on affective occupational commitment, while controlling for OPOS (Regression 3, Step 1, Table 21). The resulting regression is also significant (R^2=.178, F=38.560, p<.001). The B coefficient for OPOS (B=.167, p<.001) has a lower but significant value when compared to its unique effect (B=.230, p<.001) on civic virtue behavior. The results make it possible to conclude that the data from professionals does not support full mediation of affective attachment to the occupation between OPOS and civic virtue behaviors, thus, H2c is not supported.

Table 20 Hierarchical Mediated Regression Results for OPOS, Occupational Commitment and Helping Behavior

				Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF	Durbin-Watson
Regression	Step	Dependent Variable	Independent Variable(s)*	β	SE	β	t	Sig.								
1		Helping behavior	OPOS	.212	.030	.347	6.992	.000	.120	.118	_	48.891	.000	_	_	2.130
			(Constant)	4.798	.163	_	29.350	.000								
2		Affective occupational commitment	OPOS	.351	.051	.340	6.836	.000	.115	.113	_	46.734	.000	_	_	1.828
			(Constant)	3.707	.277		13.360	.000								
3	1	Helping behavior	OPOS	.166	.031	.272	5.278	.000	.120	.118	_	48.891	.000	_	_	_
	2		Affective Occupational Commitment	.130	.030	.220	4.282	.000	.163	.158	.043	34.798	.000	18.337	.000	2.109
			(Constant)	4.315	.195		22.079	.000								
4		Normative occupational commitment	OPOS	.407	.055	.365	7.414	.000	.133	.131	_	54.966	.000	_	_	1.826
			(Constant)	2.561	.297		8.625	.000								
5	1	Helping behavior	OPOS	.164	.032	.268	5.152	.000	.120	.118	_	48.891	.000	_	_	
	2		Normative Occupational Commitment	.117	.028	.215	4.117	.000	.160	.155	.040	34.012	.000	16.954	.000	2.104
			(Constant)	4.498	.176		25.587	.000								

*Constants in regressions are reported.

To test for H2d (Normative occupational commitment mediates the relationship between OPOS and civic virtue behaviors), civic virtue behavior has already been regressed on OPOS (see Regression 1, Table 21), reported in the last paragraph. OPOS emerges a significant predictor of civic virtue behaviors (R^2=.114, F=45.988, p<.001). Next, normative occupational commitment is regressed on OPOS (Regression 4, Table 21), which is also significant (R^2=.133, F=54.966, p<.001). In the final regression to test for the mediation effect (Regression 5, Table 21), civic virtue behavior is regressed on normative occupational commitment, controlling for OPOS (Regression 5, Step 1, Table 21). The resulting regression is significant (R^2=.136, F=28.194, p<.001) as well, but with a lower and significant B coefficient for OPOS (B=.189, p<.01) when compared to its unique effect (B=.230, p<.001) on civic virtue behaviors. These results demonstrate that full mediation of normative occupational commitment is not present between OPOS and civic virtue behaviors and H2d does not receive support.

These results suggest that individuals' perceptions of general as well as occupation related support from the organization, and their affective attachments as well as loyalty to their organizations and occupations perhaps independently influence their helping behaviors and behaviors pertaining to a general concern in the organization as an entity.

Table 21 Hierarchical Mediated Regression Results for OPOS, Occupational Commitment and Civic Virtue Behavior

				Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF	Durbin-Watson
Regression	Step	Dependent Variable	Independent Variable(s)*	β	SE	β	t	Sig.								
1		Civic virtue behavior	OPOS	.230	.034	.337	6.781	.000	.114	.111		45.988	.000			1.907
			(Constant)	4.701	.183		25.707	.000								
2		Affective occupational commitment	OPOS	.351	.051	.340	6.836	.000	.115	.113		46.734	.000			1.828
			(Constant)	3.707	.277		13.360	.000								
3	1	Civic virtue behavior	OPOS	.167	.035	.246	4.823	.000	.114	.111		45.988	.000			
	2		Affective Occupational Commitment	.177	.034	.269	5.263	.000	.178	.173	.064	38.560	.000	27.703	.000	1.905
			(Constant)	4.045	.216		18.733	.000								
4		Normative occupational commitment	OPOS	.407	.055	.365	7.414	.000	.133	.131		54.966	.000			1.826
			(Constant)	2.561	.297		8.625	.000								
5	1	Civic virtue behavior	OPOS	.189	.036	.279	5.273	.000	.114	.111		45.988	.000			
	2		Normative Occupational Commitment	.098	.032	.161	3.055	.002	.136	.132	.022	28.194	.000	9.330	.002	1.901
			(Constant)	4.449	.199		22.395	.000								

*Constants in regressions are reported.

Testing for the Relationships between Work Values and Organizational Citizenship Behaviors

The hypotheses (H3a, H3b, and H3c) questioning the relationships between work values and helping, civic virtue and sportsmanship behaviors are tested with simultaneous linear multiple regression analysis. All five types of work values are entered in three separate regressions for helping, civic virtue and sportsmanship behaviors. The results of this analysis are reported in Table 22. Work values of all types accounted for 17.2% variance in helping behaviors, 26.4% in civic virtue and 8.6% in sportsmanship behaviors.

Helping behaviors are positively predicted with involvement, accomplishment and social work values in a positive direction (R^2=.172, F=14.729, p<.001). The most important predictor of helping behaviors appears as involvement work values (B=.280, p<.001), followed by accomplishment (B=.247, p<.05) and social (B=.153, p<.05) work values. As expected, involvement and accomplishment as part of cognitive nature work values and social work values explain helping behaviors. Work values of material/extrinsic in nature do not predict helping behaviors. Those individuals who place high importance on responsibility, achievement and interest in their jobs are more likely to help others in work related issues.

Cognitive nature work values of involvement and accomplishment enter the regression analysis as predictors of civic virtue behavior (R^2=.264, F=25.457, p<.001). Involvement work values (B=.472, p<.001) have slightly higher weight than accomplishment work values (B=.347, p<.01) in explaining civic virtue behaviors. Social or extrinsic/material work values do not enter the regression equation for such

behaviors. Teachers and engineers who value their work as meaningful and who are interested in their jobs are also likely to be more concerned about the organization related issues in general.

Finally, 8.6% of the variance in sportsmanship behaviors (R^2=.086, F=6.688, p<.001) is explained by intrinsic work values of accomplishment (B=.606, p<.01) with a positive weight and extrinsic or material (B=-.204, p<.05) work values in a negative way. Social work values do not have any importance in explaining such behaviors. The respondents from two occupations reported the importance of interest in their jobs and personal growth in less complaining about trivial matters in the organization. In addition, they viewed material values pertaining to pay and benefits as important for behaving in a "sportsman" way.

In this study, work values related to involvement, prestige and accomplishment are considered to represent the intrinsic/cognitive dimension in line with the earlier classification (Elizur et al., 1991). Social work values represent the social/affective aspect, while material work values are related to the instrumental/material aspect.

H3a (Work values that are intrinsic/cognitive in nature are positively associated with helping, civic virtue and sportsmanship behaviors) is partially supported since not all three types of work values that are considered as cognitive or intrinsic in nature (i.e. involvement, prestige, and accomplishment) predicted each type of OCB at the same time. Helping and civic virtue behaviors are predicted with involvement and accomplishment work values, sportsmanship behavior with accomplishment work values.

Table 22 Regression Results for Organizational Citizenship Behaviors with Work Values as Independent Variable

	Helping Behavior					Civic Virtue Behavior					Sportsmanship Behavior				
	Unstandardized Coefficients		Standardized Coefficients			Unstandardized Coefficients		Standardized Coefficients			Unstandardized Coefficients		Standardized Coefficients		
Independent Variables	β	SE β	β	t	Sig.	β	SE β	β	t	Sig.	β	SE β	β	t	Sig.
Constant	2.093	.538	_	3.893	.000	.761	.565	_	1.347	.179	.158	.982		.161	.872
Involvement work values	.280	.077	.249	3.613	.000	.472	.081	.378	5.802	.000	-.008	.141	-.004	-.057	.955
Prestige work values	-.001	.091	-.001	-.010	.992	-.038	.096	-.028	-.402	.688	.279	.166	.131	1.679	.094
Accomplishment work values	.247	.106	.152	2.336	.020	.347	.111	.192	3.129	.002	.606	.193	.215	3.143	.002
Social work values	.153	.074	.135	2.077	.039	-.053	.078	-.042	-.688	.492	.060	.135	.031	.448	.654
Material work values	-.084	.052	-.090	-1.603	.110	.079	.055	.077	1.447	.149	-.204	.095	-.127	-2.138	.033
R^2			.172					.264					.086		
Adjusted R^2			.161					.254					.073		
F			14.729					25.457					6.688		
Sig. F			.000					.000					.000		
Total df			359					359					359		
Durbin-Watson			2.025					1.809					1.970		

H3b (Work values that are social in nature are positively related with helping behaviors) is supported since social work values positively explain helping behaviors. Sportsmanship behaviors are also predicted with material work values in a negative direction, thus the next hypothesis, H3c (Work values that are extrinsic/material in nature are negatively associated with sportsmanship behaviors) is supported.

Testing for the Relationships between Dispositional Affect and Organizational Citizenship Behaviors

The relationships between dispositional affect (positive-PA and negative-NA) and citizenships behaviors are tested with three separate regression analysis, for each of helping, civic virtue and sportsmanship behaviors. The results of factor analyses suggested a two factor structure of NA, which are interpreted as internal NA (NA-I) and NA as a result of relations with others (NA-O). Both factors of NA entered the regression analyses with PA to test for their significance in explaining the three types of citizenship behaviors. The results of these analyses are presented in Table 23.

As expected, helping behavior is only predicted by PA ($B=.414$, $p<.001$) in a positive direction ($R^2=.222$, $F=33.824$, $p<.001$). PA also ($B=.442$, $p<.001$) predicted civic virtue behaviors in a positive way ($R^2=.223$, $F=34.141$, $p<.001$). Sportsmanship behaviors are predicted with NA-I ($B=-.339$, $p<.001$) and NA-O ($B=-.295$, $p<.001$) in a negative direction ($R^2=.195$, $F=28.665$, $p<.001$). These results suggest that people who evaluate themselves as holding a positive outlook are more likely to help others and more concerned with the organization in general. On the other hand,

individuals who have more negative feelings, both internal and toward others, have a tendency to complain about less than ideal situations in the organization. In other words, such people are not inclined to exert sportsmanship behaviors.

Hypothesis 4a (Positive affect is positively associated with helping, civic virtue and sportsmanship behaviors) receives partial support for the relationships between positive affect and citizenship behaviors, since sportsmanship is not predicted with positive affect. Hypothesis 4b (Negative affect is negatively associated with civic virtue and sportsmanship behaviors) is also partially supported since civic virtue behavior is not predicted with either NA-I or NA-O.

Table 23 Regression Results for Organizational Citizenship Behaviors with Dispositional Affect as Independent Variable

Independent Variables	Helping Behavior					Civic Virtue Behavior					Sportsmanship Behavior				
	Unstandardized Coefficients		Standardized Coefficients			Unstandardized Coefficients		Standardized Coefficients			Unstandardized Coefficients		Standardized Coefficients		
	β	SE β	β	t	Sig.	β	SE β	β	t	Sig.	β	SE β	β	t	Sig.
Constant	3.928	.278		14.141	.000	3.907	.309		12.636	.000	5.863	.491		11.933	.000
Positive Affect (PA)	.414	.044	.445	9.316	.000	.442	.049	.427	8.941	.000	.143	.079	.089	1.825	.069
Negative Affect (NA-I)	-.017	.047	-.022	-.359	.720	-.039	.052	-.046	-.739	.461	-.339	.083	-.256	-4.084	.000
Negative Affect (NA-O)	-.064	.052	-.075	-1.212	.226	-.097	.058	-.102	-1.659	.098	-.295	.093	-.200	-3.187	.002
R^2	.222					.223					.195				
Adjusted R^2	.215					.217					.188				
F	33.824					34.141					28.665				
Sig. F	.000					.000					.000				
Total df	359					359					359				
Durbin-Watson	2.020					1.756					1.842				

The hypothesized relationships of the study are summarized in Table 24.

Table 24 Summary of Hypothesized Relationships

Hypothesis	Level of Support*
1a Affective organizational commitment mediates the relationship between POS and helping behaviors	NS
1b Normative organizational commitment mediates the relationship between POS and helping behaviors	NS
1c Affective organizational commitment mediates the relationship between POS and civic virtue behaviors	NS
1d Normative organizational commitment mediates the relationship between POS and civic virtue behaviors	NS
2a Affective occupational commitment mediates the relationship between OPOS and helping behaviors	NS
2b Normative occupational commitment mediates the relationship between OPOS and helping behaviors	NS
2c Affective occupational commitment mediates the relationship between OPOS and civic virtue behaviors	NS
2d Normative occupational commitment mediates the relationship between OPOS and civic virtue behaviors	NS
3a Work values that are intrinsic/cognitive in nature are positively associated with helping, civic virtue and sportsmanship behaviors	PS
3b Work values that are social in nature are positively related with helping behaviors	S
3c Work values that are extrinsic/material in nature are negatively associated with sportsmanship behaviors	S
4a Positive affect is positively associated with helping, civic virtue and sportsmanship behaviors	PS
4b Negative affect is negatively associated with civic virtue and sportsmanship behaviors	PS

* S=Support, PS=Partial Support, NS=No Support

Testing for Moderation of Occupation

In order to come up with an answer to the first research question investigating the moderating effect (if any) of occupation between contextual antecedents and each of the three types of citizenship behaviors, three hierarchical moderated regression analyses are conducted. Each regression had two steps. In the first step, all the

correlated variables and occupation (coded as dummy; 0=engineers, 1=teachers) for the related dependent variable are entered. In the second step, the interaction terms calculated as the product of mean centered study independent variables and occupation are entered into the analyses, using enter method.

Since the interaction terms of the study variables and occupation were insignificant for helping and sportsmanship behaviors, the results did not point to any moderation effect of occupation (see Tables 30 and 31 in Appendix C). Occupation only moderated the relationship between involvement work values and civic virtue behaviors. The results of the hierarchical moderated regression analysis for the significant correlates that explain the civic virtue behaviors are shown in Table 25.

The first step explains 39.8% of the variance in civic virtue behaviors (R^2=.398, F=15.145, p<.001). Affective organizational commitment (B=.081, p<.05); involvement (B=.368, p<.001), prestige (B=-.207, p<.05) and material work (B=.124, p<.05) values as well as PA (B=.218, p<.05) enter the model in a significant way in the first step. The second step (R^2=.439, F=8.917, p<.05), in which all interactions are included, suggests a 43.9% explanation in civic virtue behaviors by only three significant predictors of involvement work values (B=.562, p<.001), PA (B=.169, p<.05) in a positive direction, and the interaction (B=-.436, p<.01) for involvement work values and occupation in a negative direction.

The results of this analysis suggest that engineers who have higher values of job responsibility and meaningful work are more likely to be concerned with the organization or actively participate in organizational events.

Table 25 Moderated Regression Results for Predictors of Civic Virtue Behavior

Step	Predictor(s)	Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF
		β	SE	β	t	Sig.							
1	Affective Organizational Commitment	.081	.040	.127	2.004	.046	.398	.371	–	15.145	.000	–	–
	Involvement Work Values	.368	.078	.294	4.727	.000							
	Prestige Work Values	-.207	.092	-.152	-2.259	.024							
	Material Work Values	.124	.052	.120	2.394	.017							
	Positive Affect	.218	.053	.210	4.110	.000							
	(Constant)	1.018	.593		1.716	.087							
2	Involvement Work Values	.562	.106	.450	5.293	.000	.439	.390	.042	8.917	.000	1.750	.045
	Positive Affect	.169	.079	.163	2.136	.033							
	Occupation X Involvement Work Values	-.476	.159	-.247	-2.989	.003							
	(Constant)	.933	.829		1.125	.261							

Durbin -Watson Value: 1.976

Results are reported only for the significant predictors in the two steps.

Testing of the Overall Model

Up to this point, the proposed model has been tested using separate regression equations to explain the hypothesized relationships between the contextual and dispositional antecedents and citizenship behaviors of helping, civic virtue and sportsmanship. Contextual variables including perceptions of organizational (and occupation related) support together with organizational and occupational commitments are tested using hierarchical mediated regression analyses for each type of citizenship behaviors. Furthermore, work values and dispositional affect has been tested with multivariate linear regression analysis separately for each of helping, civic virtue and sportsmanship behaviors. Hierarchical moderated regression analyses were conducted to test for the moderation of occupation between antecedents and citizenship behaviors.

A more rigorous approach to test the proposed model would be structural equation modeling (SEM) to examine the multiple and interrelated dependence relationships. SEM requires a well-defined theory and is sensitive to sample size to measure the relationships between constructs for confirmatory purposes. Although earlier research has some established causal relationships with the constructs used in this study, it also has contradictory findings with regard to the antecedents of citizenship behaviors as outlined in Chapter 3, which makes the researcher to question the applicability of SEM to test or confirm the proposed model, since the purpose of the study is more focused on explanation. In addition, sample size requirements of SEM might exceed 500 when the factors to be measured exceed the number of six (Hair et al., 2006). Moreover, although the data displayed multivariate

normality in regression analyses, there are minor departures from normality when the constructs that make up the model are examined individually. Due to the model requirements and restrictions, the application of SEM to the proposed model has the potential to provide misleading results.

In order to test for the overall model to answer the second research question investigating the contextual and dispositional antecedents of three types of organizational citizenship behaviors when treated simultaneously, three stepwise regression analyses for helping, civic virtue and sportsmanship behaviors as dependent variables are conducted. The independent variables in these regressions are the ones that are correlated with each type of behaviors as presented in the correlation table (Table 17). The independent variables for helping and civic virtue behaviors included all the contextual and dispositional variables, except for continuance organizational and occupational commitments. For sportsmanship behaviors, continuance and normative occupational commitments as well as extrinsic/material work values are not considered to be included in the stepwise regression since these variables do not display significant correlations with sportsmanship behaviors (see Table 17). Stepwise regression is aimed to explain each type of behavior both to reduce the level of multicollinearity and to explore each variable's importance in explaining helping, civic virtue and sportsmanship behaviors.

The regression results for helping behavior are presented in Table 26. According to the results of the stepwise regression analysis, 31.9% of the variance in helping behaviors is significantly explained with six variables (R^2=.319, F=27.569, $p<.05$). PA, perceived occupation related organizational support (OPOS), involvement work values, normative occupational commitment, social work values

Table 26 Stepwise Regression Results for Predictors of Helping Behavior

Model	Predictor(s)	Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF
		β	SE	β	t	Sig.							
1	Positive Affect (PA)	.430	.044	.463	9.870	.000	.214	.212	_	97.425	.000	_	_
	(Constant)	3.666	.230		15.930	.000							
2	PA	.366	.044	.394	8.243	.000	.261	.257	.047	62.990	.000	22.660	.000
	OPOS	.139	.029	.227	4.760	.000							
	(Constant)	3.270	.238		13.713	.000							
3	PA	.291	.047	.312	6.139	.000	.293	.287	.032	49.206	.000	16.254	.000
	OPOS	.131	.029	.215	4.592	.000							
	Involvement Work Values	.223	.055	.199	4.032	.000							
	(Constant)	2.306	.334		6.900	.000							
4	PA	.280	.047	.301	5.911	.000	.303	.295	.009	38.493	.000	4.787	.029
	OPOS	.112	.030	.183	3.749	.000							
	Involvement Work Values	.199	.056	.178	3.548	.000							
	Normative Occupational Commitment	.059	.027	.108	2.188	.029							
	(Constant)	2.337	.333		7.023	.000							
5	PA	.274	.047	.295	5.808	.000	.310	.301	.008	31.860	.000	4.017	.046
	OPOS	.109	.030	.178	3.649	.000							
	Involvement Work Values	.145	.062	.129	2.327	.021							
	Normative Occupational Commitment	.060	.027	.109	2.220	.027							
	Social Work Values	.117	.058	.103	2.004	.046							
	(Constant)	1.984	.375		5.289	.000							
6	PA	.291	.048	.313	6.104	.000	.319	.307	.009	27.569	.000	4.526	.034
	OPOS	.114	.030	.187	3.850	.000							
	Involvement Work Values	.199	.067	.178	2.974	.003							
	Normative Occupational Commitment	.066	.027	.121	2.460	.014							
	Social Work Values	.183	.066	.161	2.780	.006							
	Prestige Work Values	-.175	.082	-.143	-2.127	.034							
	(Constant)	2.200	.387		5.687	.000							

Durbin-Watson: 2.137

and prestige work values (negative) entered the equation respectively in six consecutive steps. When the last regression equation in Table 26 is examined, the most important of the six factors to explain helping behavior appears as dispositional PA (B=.291, p<.001). The next variable with the highest weight is involvement work values (B=.199, p<.01), followed by social work values (B=.183, p<.01), prestige work values (B=-.175, p<.05), OPOS (B=.114, p<.001) and normative occupational commitment (B=.066, p<.05).

It is possible to conclude that people are likely to help others when they have a positive outlook, and value job responsibility, job status and interactions with coworkers as important. In addition, people's feelings of loyalty to their occupation and perceptions that the organization cares for their occupational advancement foster the act of helping others.

The results of stepwise regression analysis for civic virtue behavior are presented in Table 27. According to these results, four variables significantly explain 36.3% of the variance in civic virtue behaviors (R^2=.363, F=50.613, p<.05). Involvement work values, affective organizational commitment, PA and OPOS entered the regression equation respectively in four successive steps. As shown in Table 27, the last regression equation suggests that the most important of the four factors in relation to civic virtue behaviors comes out as involvement work values (B=.407, p<.001). The next variable with the highest weight is positive affect (B=.220, p<.001), followed by affective organizational commitment (B=.099, p<.01), and perceived occupation related support (B=.088, p<.05).

Table 27 Stepwise Regression Results for Predictors of Civic Virtue Behavior

Model	Predictor(s)	Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF
		β	SE	β	t	Sig.							
1	Involvement Work Values	.611	.058	.489	10.597	.000	.239	.237	_	112.298	.000	_	_
	(Constant)	2.087	.363		5.753	.000							
2	Involvement Work Values	.498	.058	.399	8.645	.000	.314	.310	.075	81.593	.000	38.975	.000
	Affective Organizational Commitment	.184	.030	.288	6.243	.000							
	(Constant)	1.834	.347		5.282	.000							
3	Involvement Work Values	.405	.060	.324	6.765	.000	.351	.346	.038	64.307	.000	20.721	.000
	Affective Organizational Commitment	.141	.030	.220	4.636	.000							
	Positive Affect (PA)	.235	.052	.226	4.552	.000							
	(Constant)	1.423	.350		4.068	.000							
4	Involvement Work Values	.407	.059	.326	6.863	.000	.363	.356	.012	50.613	.000	6.532	.011
	Affective Organizational Commitment	.099	.034	.155	2.898	.004							
	Positive Affect (PA)	.220	.051	.213	4.280	.000							
	OPOS	.088	.034	.129	2.556	.011							
	(Constant)	1.232	.355		3.469	.001							

Durbin-Watson: 1.922

Looking at these results, it could be argued that people are likely to participate in organizational activities when they highly value feelings of responsibility for the job and are affectively attached to the organization. Furthermore, they are likely to be more concerned with their organizations when they see things in a positive way and hold the perceptions that the organization provides support in the presence of an occupation related problem.

Overall regression results for sportsmanship behaviors are presented in Table 28. The results of the stepwise regression analysis state that 24.6% of the variance in sportsmanship behaviors is significantly explained with four of the study variables (R^2=.246, F=28.966, p<.01). Four variables of NA-I, NA-O, perceived organizational support and accomplishment work values entered the regression equation respectively in four consecutive steps. According to the last regression equation in Table 28, the most important of the four variables that explain sportsmanship behaviors appears as accomplishment work values (B=.416, p<.01). The next variable with the highest importance is NA-I (B=-.325, p<.001), followed by NA-O (B=-.212, p<.05) and perceptions of organizational support (B=.208, p<.001).

The results make it possible to conclude that people are less likely to show sportsmanship behaviors when they hold negative feelings both in general and in their relations with others. In contrast, they are less likely to complain about trivial organizational issues when they think that the organization cares for their well-being and sustain high values pertaining to achievement.

Three points are of special importance in the test of the overall model. First, perceptions of occupation related support from the organization (OPOS) appears as a significant predictor for both helping and civic virtue behaviors, pointing to the

Table 28 Stepwise Regression Results for Predictors of Sportsmanship Behavior

Model	Predictor(s)	Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF
		β	SE	β	t	Sig.							
1	Negative Affect (NA-I)	-.533	.064	-.402	-8.315	.000	.162	.160	_	69.143	.000	_	_
	(Constant)	6.614	.203		32.631	.000							
2	Negative Affect (NA-I)	-.458	.065	-.346	-7.101	.000	.207	.203	.045	46.651	.000	20.411	.000
	POS	.261	.058	.220	4.518	.000							
	(Constant)	5.048	.399		12.655	.000							
3	Negative Affect (NA-I)	-.443	.064	-.334	-6.954	.000	.235	.228	.028	36.415	.000	12.847	.000
	POS	.213	.058	.180	3.644	.000							
	Accomplishment Work Values	.486	.136	.172	3.584	.000							
	(Constant)	2.048	.924		2.216	.027							
4	Negative Affect (NA-I)	-.325	.081	-.246	-4.005	.000	.246	.238	.011	28.966	.000	5.299	.022
	POS	.208	.058	.175	3.577	.000							
	Accomplishment Work Values	.416	.138	.147	3.010	.003							
	Negative Affect (NA-O)	-.212	.092	-.143	-2.302	.022							
	(Constant)	2.599	.949		2.737	.007							

Durbin -Watson Value: 1.990

importance that teachers and engineers in the sample place on their occupational acknowledgement and advancement. Second, work values, as rather enduring desirable end-states or behavior, come out as important antecedents for explaining citizenship behaviors of helping, civic virtue and sportsmanship. Third, dispositional affect, either PA or NA, significantly predicts citizenship behaviors.

The relationships that come out following the tests for the overall model are depicted in Figure 2. In the overall model, normative organizational commitment, affective and continuance occupational commitment and material work values do not enter any of the regression equations, so the results are interpreted accordingly in conclusions.

Mean Comparisons for the Differences between the Occupations

Group means are computed for representatives of two occupations, engineers and teachers, to test for occupational differences. Significance of F value in Levene's test is checked first to identify equal variances across the samples for two groups, insignificant values of which assume equal variances at 95% confidence level. Continuance organizational commitment, perceived occupation related organizational support and prestige work values do not have equal variances according to Levene's test across the two occupational groups. Teachers scored higher than engineers ($\bar{x}$=4.42 vs. 4.01, $p<.01$) in continuance organizational commitment. In other words, teachers perceive higher costs than engineers associated with leaving their organization/school.

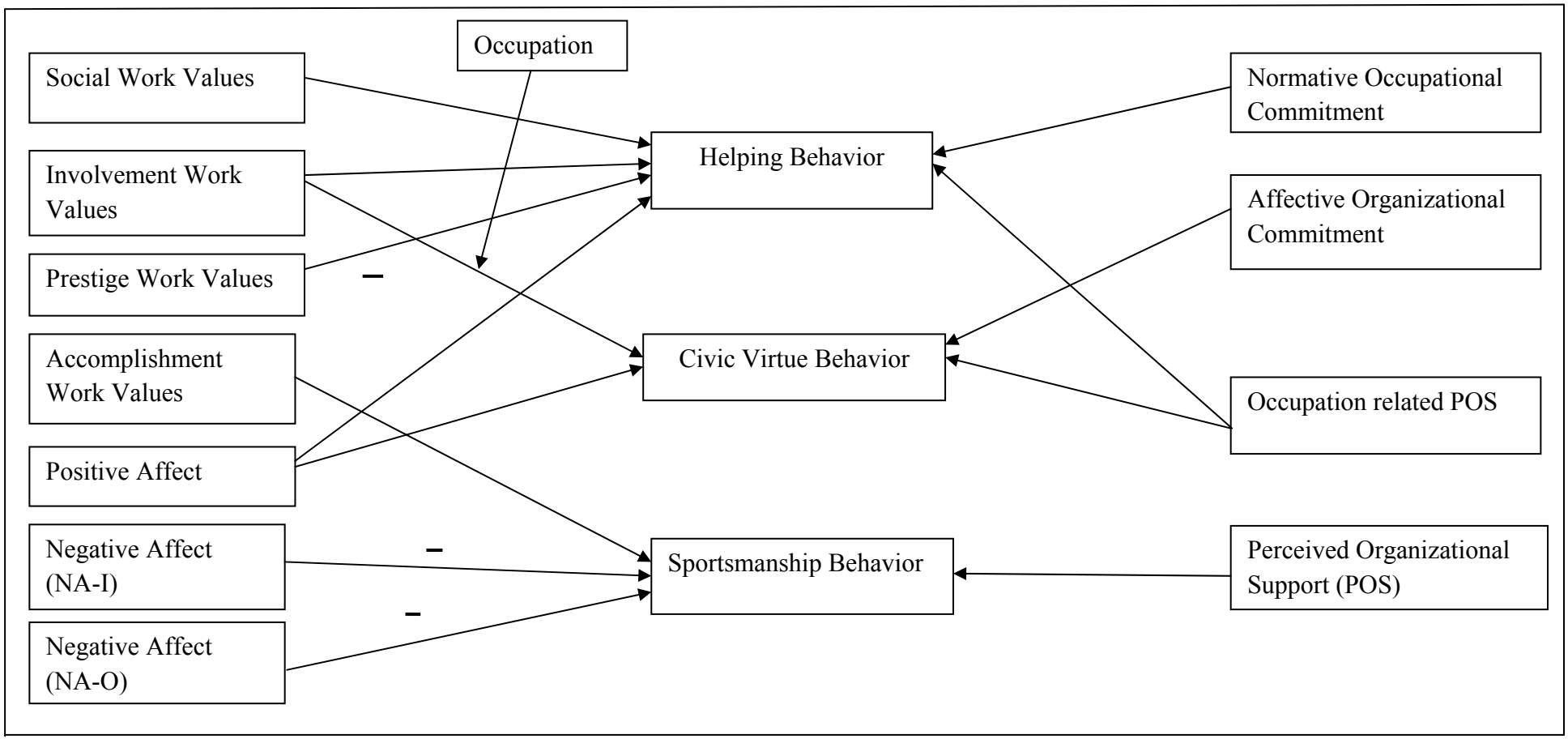

Figure 2 Revised relationships between study variables

In addition, perceptions of occupation related organizational support is more critical for teachers ($\bar{x}$=5.71, p<.001) than for engineers ($\bar{x}$=4.82, p<.001). Teachers ($\bar{x}$=6.59, p<.001) also evaluated prestige work values like job status and work conditions as more important for themselves than engineers did ($\bar{x}$=6.23, p<.001). For the rest of the study variables, Levene's test confirmed equality of variances.

Second, t-tests for equality of group means are carried out at 95% confidence level, where significant t values required different means between the two groups. The results for the t-tests suggest that continuance occupational commitment, material work values and others related negative affect are not significantly different for the two groups. The results of Levene's test and t-tests are presented in Table 29.

The results for the t-tests suggest that engineers and teachers differed in terms of their thoughts about their organizations and occupations, as well as the importance they place on different type of work related values and the positive feelings and negative feelings they hold in relations with others.

More specifically, in terms of citizenship behaviors, teachers scored higher than engineers for helping ($\bar{x}$=6.02 vs. 5.81, p<.01), civic virtue ($\bar{x}$=6.10 vs. 5.72, p<.001) and sportsmanship behaviors ($\bar{x}$=4.76 vs. 5.26, p<.001). These results suggest that teachers are more concerned than engineers in terms of helping others and organization related issues, while engineers are less likely to complain at work.

When contextual variables are concerned, teachers think more positive than engineers in terms of affective attachment ($\bar{x}$=5.52 vs. 4.83, p<.001) and normative commitment ($\bar{x}$=5.09 vs. 3.96, p<.001) to the organization they work for. In addition, they are also more likely to have stronger feelings about their occupation than engineers. Teachers ($\bar{x}$=5.79, p<.001) are emotionally attached to their occupation

more than engineers ($\bar{x}$=5.32, p<.001). Furthermore, teachers ($\bar{x}$=5.14, p<.001) feel higher responsibility to remain in their occupation than engineers do ($\bar{x}$=4.28, p<.001). The perceptions of support from the organization are also of higher importance for teachers ($\bar{x}$=5.51, p<.001) than for engineers ($\bar{x}$=4.77, p<.001).

When the two occupational groups are compared in terms of work values, teachers also scored higher than engineers in involvement ($\bar{x}$=6.41 vs. 6.12, p<.001), accomplishment ($\bar{x}$=6.69 vs. 6.48, p<.001) and social ($\bar{x}$=6.50 vs. 6.13, p<.001) work values. The work values related with contribution to society, meaningful work, personal growth and interaction with people are more important for teachers than engineers. Teachers ($\bar{x}$=5.37, p<.001) are also more likely to hold positive feelings compared to engineers ($\bar{x}$=5.08, p<.001). Finally, when internal negative affect is considered, teachers ($\bar{x}$=2.91, p<.05) are less likely to hold a negative outlook than engineers ($\bar{x}$=3.12, p<.05).

Table 29 Comparisons of Occupation Means (N=360; N(E)=180, N(T)=180)

	Mean E	Mean T	Levene Significance	t value	df	sig. (2-tailed)
Helping behavior	5.81	6.02	.602	-2.813	358	.005
Civic virtue behavior	5.72	6.10	.224	-4.468	358	.000
Sportsmanship behavior	4.76	5.26	.090	-3.804	358	.000
Affective organizational commitment	4.83	5.52	.808	-5.319	358	.000
Continuance organizational commitment	4.01	4.42	.019*	-3.014	358	.003
Normative organizational commitment	3.96	5.09	.357	-8.747	358	.000
Affective occupational commitment	5.32	5.79	.478	-3.664	358	.000
Continuance occupational commitment	4.79	4.84	.122	-.347	358	.729
Normative occupational commitment	4.28	5.14	.211	-6.452	358	.000
Perceived organizational support (POS)	4.77	5.51	.347	-6.913	358	.000
Occupation related POS	4.82	5.71	.038*	-7.514	358	.000
Involvement work values	6.12	6.41	.878	-4.337	358	.000
Prestige work values	6.23	6.59	.022*	-5.933	358	.000
Accomplishment work values	6.48	6.69	.237	-4.553	358	.000
Social work values	6.13	6.50	.088	-5.567	358	.000
Material work values	6.17	6.22	.431	-.565	358	.572
Positive affect (PA)	5.08	5.37	.180	-3.604	358	.000
Negative affect (NA-I)	3.12	2.91	.139	2.104	358	.036
Negative affect (NA-O)	2.01	1.92	.259	1.065	358	.288

* Levene is significant at .05 level, indicating inequality of variances across occupations; appropriate adjustment is made for this inequality.

E=Engineers, T=Teachers

CHAPTER VI

DISCUSSION AND CONCLUSION

Discussion

The purpose of this study was to investigate the contextual and dispositional antecedents of organizational citizenship behaviors, which consisted of helping, civic virtue and sportsmanship behaviors. The contextual antecedents included organizational and occupational commitments, perceived organizational support and perceptions of occupation related support from the organization. Dispositional antecedents were work values, positive and negative affect. Helping behavior is significantly explained with normative occupational commitment, perceptions of occupation related support from the organization, positive affect, involvement and social work values in a positive way, and with prestige work values in a negative way. Civic virtue behavior is predicted significantly by affective organizational commitment, perceptions of occupation related support from the organization, positive affect and involvement work values in a positive direction. Sportsmanship behavior is explained with perceived organizational support and accomplishment work values in a positive way, while with internal negative affect and others-related negative affect in a negative way. Although the cultural context for the sample of the study was different from most of the former studies that are conducted in the Western cultures, results of the study suggests some consistencies with findings of prior research. This study also investigated differences for the determinants of OCBs across two occupations.

Three approaches were followed in arriving at the conclusions. First, the hypotheses for the proposed model were tested separately. These analyses were followed by the moderation tests conducted to check if occupation accounted for any difference in explaining OCBs. Finally, tests were performed to achieve an overall picture with the simultaneous inclusion of all the correlated antecedents of helping, civic virtue and sportsmanship behaviors.

The mediation hypotheses related to contextual antecedents did not receive full support, though partial mediations existed. Hypotheses related to dispositional variables of work values and affect were either supported or partially supported. Moderation analysis yielded a modest significance for the moderation of occupation between involvement work values which are cognitive/intrinsic in nature and civic virtue behaviors. In addition, helping, civic virtue and sportsmanship behaviors were subjected to three more regression analyses for an overall test of the relationships with each correlated potential antecedent. Despite the presence of some common predictors between three types of citizenship behaviors, each of these behaviors was mostly predicted with different antecedents.

Organizational commitment entered into the analyses for the hypothesized relationships with its two components of affective and normative commitments. It was proposed as a mediator of the relationship between perceptions of organizational support and OCBs, specifically helping and civic virtue behaviors. Full mediation was not achieved in the analyses, which lead to the further investigation of an overall model, since the mediation tests suggested potential independent contributions of support perceptions and commitment forms. In three stepwise regression analyses conducted for three types of OCB, continuance organizational commitment only entered in the one to analyze sportsmanship behavior as a potential antecedent,

though did not come out as a significant predictor of such behaviors. It was not correlated with helping and civic virtue behaviors, so was excluded from the stepwise regression analyses for explaining these behaviors. As a result of the overall analyses, none of the dimensions for organizational commitment accounted for the variance in helping behaviors in the presence of other contextual and dispositional variables. This finding is in contrast with previous research, suggesting organizational commitment, especially affective component as an important attitudinal predictor of helping behaviors (for a review, see Podsakoff et al., 2000). An unusual finding in the study came out as affective organizational commitment, predicting civic virtue behaviors. Although might sound interesting, it is somewhat meaningful to think that people with affective attachment to their organizations are likely to care for it and take actions toward its improvement and effective functioning.

As work organizations are going through changes and work relationships become less stable and more volatile, perhaps due to changes in external environment, employees have the potential to shift their focus from organization to their occupations or careers (Snape and Redman, 2003). Thus, occupational commitment is investigated as a potential predictor in citizenship behaviors. To help analyze occupation related relationships, a new measure is introduced. This new measure attempts to measure the exchange relationships between the employee and the organization in relation to occupations and labeled as perceived occupation related organizational support (OPOS). In the proposed model, affective and normative occupational commitments were hypothesized to mediate the relationships between OPOS and OCBs, specifically helping and civic virtue behaviors. The relationships were not fully mediated. In the overall tests, only normative

occupational commitment predicted helping behaviors, which could be interpreted as people loyal to their occupations are more likely to help others in work-related issues. Affective occupational commitment did not explain any type of the citizenship behaviors in this framework.

The new construct pertaining to perceptions of occupation related support (OPOS), came out as a significant predictor for both helping and civic virtue behaviors. It is very likely that when individuals feel that the organizations acknowledge their occupational expertise and provide means for occupational advancements, they reciprocate with increased helping behavior and take more actions for the improvements or effective functioning in the organizations. Although the mediation hypotheses did not receive support, the tests for the overall model suggested perceived organizational support (POS) as a significant predictor for sportsmanship behaviors. When employees feel the organization cares for them in general, they are less likely to complain about trivial matters.

The research on values suggests three types of work values: intrinsic/cognitive, extrinsic/material, and social/affective (Elizur and Koslowsky, 2001; Elizur et al., 1991). Work values are mostly studied in relation to attitudes like commitment and job satisfaction (George and Jones, 1997; Kidron, 1978; Blood, 1969). Recent work by Kabasakal et al. (2008), presented evidence for the predictive ability of work values for OCBs in a cross-cultural study conducted with executive trainees. The overall tests in the present study provided supporting results on such ability of work values. Intrinsic/cognitive work values of involvement appeared as significant strong predictor of both helping and civic virtue behaviors in the tests for the overall model in a positive direction. When people highly value job responsibility and work as meaningful, they are more likely to engage in people and organization

related prosocial behaviors. In addition, occupation moderated the relationship between involvement work values and civic virtue behavior. Engineers who value job responsibility as important are more likely to be concerned with the organization at a macro-level and participate in organizational activities. Prestige values, also cognitive in nature provide significant explanation for helping behaviors in a negative way. Those who value self-esteem and job status as important are less likely to conduct helping behaviors. Cognitive/intrinsic work values of accomplishment explained sportsmanship behaviors in a significant positive way. People who place high value on achievement and personal growth are less likely to complain about less than ideal situations in an organization. In addition, social/relational work values pertaining to the importance of relations with coworkers appear as significant predictor of helping behaviors.

Dispositional attributes of positive and negative affect also predict citizenship behaviors significantly. In the overall tests for each type of behavior, positive affect explained helping and civic virtue behaviors in a positive way, while negative affect with its two dimensions (internal NA and NA concerning interactions with others) accounts for the variance in sportsmanship behaviors negatively. Positive outlook is likely to predispose people to exhibit behaviors that benefit coworkers or the organization at a macro-level. On the other hand, negative feelings lead to more complaints about trivial organizational issues, hence less "sportsman" behaviors.

According to the t-test results comparing the two occupations (teaching vs. engineering), no difference was detected between occupations with regard to continuance occupational commitment, material work values and others related negative affect. These predictors are rather stable and do not vary across the two occupations.

In terms of other variables, teachers had stronger evaluations than engineers, excluding internal negative affect. Teachers were more affectively attached to and more loyal to their employers and occupations, thus, scored higher in affective and normative organizational and occupational commitments. They also tend to evaluate work values that are cognitive and social in nature as more important than engineers do. Moreover, occupation accounted for some difference in people's appreciations of support from the organization, both in general and occupation related, in favor of teachers. Teachers were also inclined to hold more positive and less negative internal outlook than engineers.

Conclusion

The results of this study point to the importance of both context and disposition as significant determinants of citizenship behaviors, specifically helping, civic virtue and sportsmanship. Commitment to the organization and occupation, perceptions of organizational support (with the addition of occupation related support) are context related evaluations of individuals (e.g. Organ and Ryan, 1995; Eisenberger et al., 1986). Their significant explanatory ability states that prosocial behaviors in organizations have the potential to be related to context in which such behaviors are performed. In addition, the results that suggest that work values, positive and negative affect as explaining OCBs might point to the importance of dispositions in understanding the construct. The findings suggest that dispositions could be as important as or perhaps more important than contextual factors in explaining OCBs, though additional research is needed for further investigations.

Context related explanations for the types of OCB in this study recall interpretations related to social exchange theory (Thibaut and Kelley, 1959), social identity theory (Tajfel and Turner, 1985) and motivation theories (Kanfer and Ackerman, 1989; Vroom, 1964). Social exchange theory suggests that individuals would be performing citizenship behaviors when they perceive positive exchanges from the organization, with emphasis on the occupation related ones in the present study. Social identity theory proposes that people have a tendency to classify themselves into different groups through invoking sense of belongingness or attachment to occupation or organization. Moreover, cognitive evaluations of maximizing utilities are likely to serve as a basis for predicting citizenship behaviors through work values.

The present study has interesting findings worth noticing. Comparative analyses of OCB (e.g. Organ and Ryan, 1995; Organ and Lingl, 1995) suggest that commitment has mostly been investigated with its one dimension, especially affective commitment to account for OCB, specifically helping behavior. This study explicitly investigates the impacts of three components of organizational commitment on OCB, and comes out with the finding that in the presence of other contextual and dispositional predictors, affective organizational commitment has a significant influence in explaining civic virtue behaviors. In addition, occupational commitment has not been investigated as a potential predictor of OCBs; further inquiries are needed to clarify the effect of this construct on OCB. According to the findings in the present study, normative occupational commitment positively, though weakly predicts helping behavior.

In the overall tests, involvement, prestige (negative), social and accomplishment work values had significant effects on citizenship behaviors, while

findings did not point to any relationship between material work values and OCB in the presence of other contextual and dispositional variables. Further research is required to look at the impacts of different work values on OCB. Work values, pertaining to desirable end-states or behavior and not easily changing frames of references, serve as very promising means for explaining OCBs, either through acting as guides for behavior (Ros et al., 1999) or their motivational aspect (French and Kahn, 1962).

The results of the study provide interesting similarities and differences among two occupations. Two occupations with different orientations are specifically selected to investigate the influence of occupation on extra-role behaviors. Respondents as professionals from two occupations, showed similarities with respect to antecedents including material work values and negative feelings they experience in relation to others. In terms of the remaining contextual and dispositional variables and behaviors, excluding the feelings related with internal negative affect, teachers had stronger evaluations than engineers and were more likely to engage in prosocial behaviors. It is possible to conclude that people from occupations with different orientations might exhibit extra-role behaviors in different modes and frequencies. It is also important to note that the findings from the present study suggest that the respondents as professionals from two crucial and distinct occupations scored above the mid-point of the scale in extra-role behaviors. The incremental amount that teachers display might be accounted for the occupational orientation.

Extra role behaviors are likely to encompass professional activities like attending professional meetings, participating in conferences, or serving as a professional committee member, which are not usually defined as part of role requirements (Snape et al., 2008). Such activities share characteristics related to

those of OCBs, like being discretionary and volitional; and are sensitive to individual's attitudes (Organ et al., 2006). Oplatka (2006), in an exploratory study of teachers' OCBs in schools, came up with prosocial behaviors of caring for a student in distress, professional assistance and pedagogical exchange, helping colleagues with administrative tasks, participation in ad hoc school committees, emotional assistance and attentiveness and taking on unrewarded roles in school as elements of teacher OCBs. The findings of the present study suggest the construct of perceptions of occupation related support from the organization (OPOS) as a significant predictor of helping and civic virtue behaviors. Support perceptions of people from the organizations related to acknowledgement of their occupational expertise and well-being point to the importance of such support in determining people's preference for engaging in such prosocial behaviors.

Podsakoff and MacKenzie (1997) provided a list of potential reasons for OCBs to influence organizational effectiveness. According to their suggestions, OCBs have the capacity to improve organizational performance through increasing coworker and managerial productivity, freeing up resources for more productive purposes, serving as a means of coordinating activities between group members and across groups, enhancing organization's ability to attract and retain the best people by making it a desirable place to work for, enhancing the stability of organizational performance and improve organizational ability to adapt to environmental changes. Such issues are crucial for organizations for remaining intact in turbulent times and might call for even more important concerns for managers and school principals.

The results of the present study could serve as a guide for managerial actions in some aspects. For highly professional employees, managers or principals are encouraged to acknowledge the crucial function of employees' occupations in the

internal work environment and respect them as professionals. The findings suggest social exchange principles and reciprocity norms as important determinants of OCBs. The managers/principals are advised to display supportive behaviors toward their employees both in terms of their well-being and occupation-related concerns, such as helping them when necessary, appreciating their occupational expertise and perhaps providing training when they need occupational advancement. These behaviors might trigger their perceptions of general and occupation related support from the organization and thus, through reciprocity norms boost the experience of prosocial behaviors. In addition, managers/principals could be advised to engage in actions that improve affective commitment to the organization, perhaps through creating a work environment in which people could develop a sense of belongingness or feel that they are a "part of the family", to benefit from civic virtue behavior of professionals. They could also focus on normative occupational commitment with providing their professional employees additional training when necessary and hence improve professionals' loyalty to their occupations to promote the experience of helping behaviors.

The dispositions of people might play a role in their choice of careers. Such variables are rather enduring and difficult to change across situations. The findings of this study suggest that people could make use of their dispositions in their occupational choices, since such behaviors have the potential to affect their prosocial behaviors in the organizations.

Though the present study has strong findings for the suggested antecedents of OCBs, it also has some limitations. The respondents for the study are from a single city in Turkey, it is possible that this would not represent the population although the data collected was subject to saturation. The study uses self-reported ratings of

professionals for all measures, which might lead to a problem of social desirability. In addition, a more rigorous method, structural equation modeling (SEM) examining the multiple and interrelated dependence relationships as an alternative could have served better to test the relationships for larger samples, though it is sensitive to multivariate normality.

Future research has the potential to yield more accurate results with the inclusion of more potential antecedents of citizenship behaviors as a general framework in larger samples from cross-cultural settings dispersed among different occupations in investigating the determinants of citizenship behaviors.

APPENDICES

Appendix A. Questionnaire in English

QUESTIONNAIRE

This research is being conducted as part of the Ph. D. Dissertation of Pinar Imer in Bogazici University, Department of Management. The purpose of the study is to explore the values, attitudes and behaviors of individuals in their general and work lives. Data is collected from participants from different occupations. Findings will be evaluated anonymously in individual level and no information will be shared. Thank you for your participation.

I. Please indicate your level of agreement with each of the following statements related to your work on a scale from 'strongly disagree' to 'strongly agree'.

	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
I help out others who fall behind in their work	O	O	O	O	O	O	O
I willingly share my expertise with others	O	O	O	O	O	O	O
I try to act like a peacemaker when others have disagreements	O	O	O	O	O	O	O
I take steps to try to prevent problems with coworkers	O	O	O	O	O	O	O
I willingly give of my time to help others who have work related problems	O	O	O	O	O	O	O
I 'touch base' with others before initiating actions that might affect them	O	O	O	O	O	O	O
I encourage others when they are down	O	O	O	O	O	O	O
I provide constructive suggestions about how others can improve their effectiveness	O	O	O	O	O	O	O
I'm willing to risk disapproval to express my beliefs about what's best for others/organization	O	O	O	O	O	O	O
I attend and actively participate in meetings	O	O	O	O	O	O	O
I always focus on what is wrong with our situation, rather than the positive side	O	O	O	O	O	O	O
I consume a lot of time complaining about trivial matters	O	O	O	O	O	O	O
I always find fault with what others are doing	O	O	O	O	O	O	O

II. Please indicate for each of the following items to what extent it is important to you for your well being on a range of 'very unimportant' to 'very important'.

	very unimportant	unimportant	somewhat unimportant	i can't decide whether it is important or not	somewhat important	important	very important
Job interest	O	O	O	O	O	O	O
Job responsibility	O	O	O	O	O	O	O
Fair supervisor	O	O	O	O	O	O	O
Independence	O	O	O	O	O	O	O
Use of abilities	O	O	O	O	O	O	O
Personal growth	O	O	O	O	O	O	O
Job achievement	O	O	O	O	O	O	O
Meaningful work	O	O	O	O	O	O	O
Advancement	O	O	O	O	O	O	O
Work feedback	O	O	O	O	O	O	O
Esteem as a person	O	O	O	O	O	O	O
Recognition for performance	O	O	O	O	O	O	O
Job security	O	O	O	O	O	O	O
Good company to work for	O	O	O	O	O	O	O
Influence at work	O	O	O	O	O	O	O
Work conditions	O	O	O	O	O	O	O
Job status	O	O	O	O	O	O	O
Pay	O	O	O	O	O	O	O
Co-workers	O	O	O	O	O	O	O
Influence in the organization	O	O	O	O	O	O	O
Interaction with people	O	O	O	O	O	O	O
Benefits	O	O	O	O	O	O	O
Contribution to society	O	O	O	O	O	O	O
Convenient hours	O	O	O	O	O	O	O

III. Following statements consist of some words that describe your feelings and emotions. Please indicate to what extent you generally feel this way on a scale from 'not at all' to 'extremely'.

	not at all	very slightly	a little	moderately	quite a bit	very much	extremely
Interested	O	O	O	O	O	O	O
Excited	O	O	O	O	O	O	O
Determined	O	O	O	O	O	O	O
Scared	O	O	O	O	O	O	O
Ashamed	O	O	O	O	O	O	O
Active	O	O	O	O	O	O	O
Irritable	O	O	O	O	O	O	O
Strong	O	O	O	O	O	O	O
Nervous	O	O	O	O	O	O	O
Alert	O	O	O	O	O	O	O
Distressed	O	O	O	O	O	O	O
Enthusiastic	O	O	O	O	O	O	O
Proud	O	O	O	O	O	O	O
Careful	O	O	O	O	O	O	O
Hostile	O	O	O	O	O	O	O
Creative	O	O	O	O	O	O	O
Guilty	O	O	O	O	O	O	O
Jittery	O	O	O	O	O	O	O
Upset	O	O	O	O	O	O	O
Afraid	O	O	O	O	O	O	O

IV. Please indicate your level of agreement with each of the following statements related to your organization on a scale from 'strongly disagree' to 'strongly agree'.

	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
I would be very happy to spend the rest of my career with this organization	O	O	O	O	O	O	O
I really feel as if this organization's problems are my own	O	O	O	O	O	O	O
I do not feel a strong sense of 'belonging' to this organization	O	O	O	O	O	O	O
I do not feel 'emotionally attached' to this organization	O	O	O	O	O	O	O
I do not feel like 'a part of the family' in this organization	O	O	O	O	O	O	O
This organization has a great deal of personal meaning to me	O	O	O	O	O	O	O
Right now, staying with my organization is a matter of necessity as much as a desire	O	O	O	O	O	O	O
It would be very hard for me to leave my orrganization right now, even if I wanted to	O	O	O	O	O	O	O
Too much of my life would be disrupted if I decided I wanted to leave my organization now	O	O	O	O	O	O	O
I feel I have too few options to consider leaving this organization	O	O	O	O	O	O	O
If I had not already put too much of myself into this organization, I might consider working elsewhere	O	O	O	O	O	O	O
One of the few negative consequences of leaving this organization would be the scarcity of available alternatives	O	O	O	O	O	O	O
I do not feel any obligation to remain with my current employer	O	O	O	O	O	O	O
Even if it were to my advantage, I do not feel it would be right to leave my organization now	O	O	O	O	O	O	O
I would feel guilty if I left my organization now	O	O	O	O	O	O	O
This organization deserves my loyalty	O	O	O	O	O	O	O
I would not leave my organization right now because I have a sense of obligation to the people in it	O	O	O	O	O	O	O
I owe a great deal to my organization	O	O	O	O	O	O	O

V. Please indicate your level of agreement with each of the following statements related to your occupation on a scale from 'strongly disagree' to 'strongly agree'.

	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
My occupation is very important for my self-image	O	O	O	O	O	O	O
I regret having entered this profession	O	O	O	O	O	O	O
I am proud to be in this profession	O	O	O	O	O	O	O
I dislike being a (name of occupation)	O	O	O	O	O	O	O
I do not identify with this profession	O	O	O	O	O	O	O
I am enthusiastic about this profession	O	O	O	O	O	O	O
I have put too much into this profession to consider changing now	O	O	O	O	O	O	O
Changing professions now would be difficult for me to do	O	O	O	O	O	O	O
Too much of my life would be disrupted if I were to change my profession	O	O	O	O	O	O	O
It would be costly for me to change my profession now	O	O	O	O	O	O	O
There are no pressures to keep me from changing professions	O	O	O	O	O	O	O
Changing professions now would require considerable personal sacrifice	O	O	O	O	O	O	O
I believe people who have been trained in a profession have a responsibility to stay in that profession for a reasonable period of time	O	O	O	O	O	O	O
I do not feel any obligation to remain in this profession	O	O	O	O	O	O	O
I feel a responsibility to this profession to continue in it	O	O	O	O	O	O	O
Even if it were to my advantage, I do not feel that it would be right to leave this profession now	O	O	O	O	O	O	O
I would feel guilty if I left this profession	O	O	O	O	O	O	O
I am in this profession because of a sense of loyalty to it	O	O	O	O	O	O	O

VI. Please indicate your level of agreement with each of the following statements related to your organization on a scale from 'strongly disagree' to 'strongly agree'.

	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
My organization strongly considers my goals and values	O	O	O	O	O	O	O
Help is available from my organization when I have a problem	O	O	O	O	O	O	O
My organization really cares about my well-being	O	O	O	O	O	O	O
My organization is willing to help me when I need a special favor	O	O	O	O	O	O	O
If given opportunity, my organization would take advantage of me	O	O	O	O	O	O	O
My organization shows very little concern for me	O	O	O	O	O	O	O
My organization cares about my opinions	O	O	O	O	O	O	O
My organization would forgive an honest mistake on my part	O	O	O	O	O	O	O
My organization strongly considers my occupational advancement	O	O	O	O	O	O	O
Help is available from my organization when I have occupation related problems	O	O	O	O	O	O	O
My organization is willing to help me when I need special training for an occupational issue	O	O	O	O	O	O	O
My organization acknowledges my expertise in my occupation	O	O	O	O	O	O	O

Age: less than 20 __ 21-25 __ 26-30 __ 31-35 __ 36-40 __ 41-45 __ 46-50 __ more than50__

Gender: Male ____ Female ____

Marital Status: Single ____ Married ____ Divorced ____ Other ____

Education: High School ___ Applied School ____ University ___ Masters ___ Ph.D. ___

Undergraduate Institution: _____

Undergraduate Department: _____

Full-time work experience (number of years): _____

Full-time work experience in current organization (number of years): _____

Monthly Income Level: less than 500TL ___ 500-1.000 TL ___ 1.000-2.000 TL ____

2.000-3.000 TL ___ 3.000-5.000 TL ___ 5.000-10.000 TL ___ more than 10.000 TL ___

Appendix B. Questionnaire in Turkish

ANKET

Bu araştırma, Boğaziçi Üniveritesi İşletme Bölümü Araştırma Görevlisi Pınar İmer'in doktora tezi kapsamında yürütülmektedir. Çalışma, bireylerin genel ve iş yaşamlarındaki tutum, değer ve davranışları ile ilgilidir. Bu amaç çerçevesinde çeşitli meslek gruplarından veri toplanması hedeflenmektedir. Bulgular gizlilik esasına göre genel olarak değerlendirilecek, kişisel bilgiler paylaşılmayacaktır. Katılımınız için teşekkür ederim.

I. Aşağıda bir kurumda çalışanların iş tanımlarında yer almayan ancak gönüllü olarak gerçekleştirdikleri birtakım davranışlar tanımlanmıştır. Bu tutum ve davranışları ne derece gerçekleştirdiğinizi 'kesinlikle katılmıyorum'dan 'kesinlikle katılıyorum'a uzanan ölçek üzerinde değerlendiriniz.

	kesinlikle katılmıyorum	katılmıyorum	pek katılmıyorum	ne katılıyorum ne katılmıyorum	biraz katılıyorum	katılıyorum	kesinlikle katılıyorum
İşinde geri kalmış olanlara yardım ederim	O	O	O	O	O	O	O
Uzmanlığımı gönüllü olarak diğerleriyle paylaşırım	O	O	O	O	O	O	O
Başkaları arasında anlaşmazlıklar olduğunda arabuluculuk yapmaya çalışırım	O	O	O	O	O	O	O
İş arkadaşlarımın arasında problem olmaması için önlem almaya çalışırım	O	O	O	O	O	O	O
İşle ilgili problemleri olanlara yardım etmek için gönüllü olarak zaman ayırırım	O	O	O	O	O	O	O
Başkalarını etkileyebilecek durumlarda harekete geçmeden önce onlarla görüşürüm	O	O	O	O	O	O	O
Morali bozuk olan bir iş arkadaşımı cesaretlendiririm	O	O	O	O	O	O	O
Başkalarının etkinliğini geliştirmek için onlara yapıcı önerilerde bulunurum	O	O	O	O	O	O	O
Kurumun veya başkalarının iyiliğine inandığım görüşlerim için onaylanmamayı göze alırım	O	O	O	O	O	O	O
Toplantılara aktif olarak katılırım	O	O	O	O	O	O	O
Olayların olumlu yönlerinden çok olumsuz yönlerine bakarım	O	O	O	O	O	O	O
Ufak sorunlardan çoğunlukla şikayet ederim	O	O	O	O	O	O	O
Başkalarının yaptıklarında sürekli hata ararım	O	O	O	O	O	O	O

II. Aşağıda çalışma yaşamının bireye sağladığı bazı unsurlar verilmiştir. Her bir unsurun sizin için ne derece önemli olduğunu ‘en önemsiz’den ‘en önemli’ye uzanan ölçek üzerinde belirtiniz.

	en önemsiz	önemsiz	kısmen önemsiz	ne önemli ne önemsiz	kısmen önemli	önemli	çok önemli
İlgilendiğiniz işi yapmak	O	O	O	O	O	O	O
Sorumluluk almak	O	O	O	O	O	O	O
Üstünüzün adil olması/davranması	O	O	O	O	O	O	O
Bağımsız olmak	O	O	O	O	O	O	O
Yeteneklerinizi kullanmak	O	O	O	O	O	O	O
Kendinizi geliştirmek	O	O	O	O	O	O	O
İşinizde başarılı olmak	O	O	O	O	O	O	O
İşinizin size birşey ifade etmesi	O	O	O	O	O	O	O
İlerlemek	O	O	O	O	O	O	O
İşinizde geri bildirim almak	O	O	O	O	O	O	O
Birey olarak saygınlık kazanmak	O	O	O	O	O	O	O
Performansinizin takdir edilmesi	O	O	O	O	O	O	O
İş güvencesi	O	O	O	O	O	O	O
İyi bir kurumda çalışıyor olmak	O	O	O	O	O	O	O
İşinizde etkili olmak	O	O	O	O	O	O	O
Çalışma koşulları	O	O	O	O	O	O	O
İşin itibarı	O	O	O	O	O	O	O
Ücret	O	O	O	O	O	O	O
Çalışma arkadaşları	O	O	O	O	O	O	O
Kurumda sözünüzün geçmesi	O	O	O	O	O	O	O
İnsanlarla etkileşim	O	O	O	O	O	O	O
Ücretin dışındaki getiriler	O	O	O	O	O	O	O
Topluma katkıda bulunmak	O	O	O	O	O	O	O
Çalışma saatlerinin uygunluğu	O	O	O	O	O	O	O

III. Aşağıda farklı duygu durumlarını belirten sözcüklere yer verilmiştir. Bu ifadelerin herbirinin genel hislerinizi ne derece yansıttığını 'hiç'ten 'aşırı derecede'ye uzanan bir ölçekte değerlendiriniz.

	hiç	çok az	az	orta	fazla	çok fazla	aşırı derecede
İlgili	O	O	O	O	O	O	O
Coşkulu	O	O	O	O	O	O	O
Kararlı	O	O	O	O	O	O	O
Tedirgin	O	O	O	O	O	O	O
Mahçup	O	O	O	O	O	O	O
Aktif	O	O	O	O	O	O	O
Rahatsız edici	O	O	O	O	O	O	O
Güçlü	O	O	O	O	O	O	O
Gergin	O	O	O	O	O	O	O
Canlı	O	O	O	O	O	O	O
Sıkıntılı	O	O	O	O	O	O	O
Hevesli	O	O	O	O	O	O	O
Gururlu	O	O	O	O	O	O	O
Dikkatli	O	O	O	O	O	O	O
Düşmanca	O	O	O	O	O	O	O
Esinli	O	O	O	O	O	O	O
Suçlu	O	O	O	O	O	O	O
Sinirli	O	O	O	O	O	O	O
Üzgün	O	O	O	O	O	O	O
Korkak	O	O	O	O	O	O	O

IV. Aşağıda bir kurumda çalışanların kuruma bağlılıkları ile ilgili ifadeler verilmiştir. Bu ifadelere katılma düzeyinizi 'kesinlikle katılmıyorum'dan 'kesinlikle katılıyorum'a uzanan ölçek üzerinde değerlendiriniz.

	kesinlikle katılmıyorum	katılmıyorum	pek katılmıyorum	ne katılıyorum ne katılmıyorum	biraz katılıyorum	katılıyorum	kesinlikle katılıyorum
Kariyerimin geri kalan kısmını bu kuruluşta geçirmekten çok mutlu olurum	O	O	O	O	O	O	O
Bu kuruluşun meselelerini gerçekten de kendi meselelerim gibi hissediyorum	O	O	O	O	O	O	O
Kuruluşuma karşı güçlü bir aitlik hissim yok	O	O	O	O	O	O	O
Bu kuruluşa kendimi duygusal olarak bağlı hissetmiyorum	O	O	O	O	O	O	O
Kendimi kuruluşumda 'ailenin bir ferdi' gibi hissetmiyorum	O	O	O	O	O	O	O
Bu kuruluşun benim için çok özel bir anlamı var	O	O	O	O	O	O	O
Şu anda kuruluşumda kalmaya devam etmek benim için istek olduğu kadar gereksinimdir	O	O	O	O	O	O	O
İstesem de şu anda kuruluşumdan ayrılmak benim için çok zor olurdu	O	O	O	O	O	O	O
Şu anda kuruluşumdan ayrılmak istediğime karar versem hayatımın çoğu altüst olur	O	O	O	O	O	O	O
Bu kuruluştan ayrılmam durumunda çok az seçeneğim olduğunu hissediyorum	O	O	O	O	O	O	O
Eğer bu kuruluşa kendimden bu kadar çok vermiş olmasaydım, başka bir yerde çalışmayı düşünebilirdim	O	O	O	O	O	O	O
Bu kuruluştan ayrılmanın az sayıdaki olumsuz sonuçlarından biri uygun alternatiflerin kıtlığıdır	O	O	O	O	O	O	O
Şu anki işverenimle kalmayı gerektirecek hiçbir yükümlülük hissetmiyorum	O	O	O	O	O	O	O
Benim için avantajlı olsa da kuruluşumdan şu anda ayrılmanın doğru olmadığını hissediyorum	O	O	O	O	O	O	O
Şu anda kuruluşumdan ayrılsam kendimi suçlu hissederim	O	O	O	O	O	O	O
Bu kuruluş benim sadakatimi hak ediyor	O	O	O	O	O	O	O
Buradaki insanlara karşı yükümlülüğüm olduğundan şu anda kuruluşumdan ayrılmak istemezdim	O	O	O	O	O	O	O
Kuruluşuma çok şey borçluyum	O	O	O	O	O	O	O

V. Aşağıda bir meslek sahibi olanların mesleklerine bağlılıkları ile ilgili ifadeler yer almaktadır. Bu ifadeler ile ilgili düşüncelerinizi 'kesinlikle katılmıyorum'dan 'kesinlikle katılıyorum'a uzanan ölçek üzerinde değerlendiriniz.

	kesinlikle katılmıyorum	katılmıyorum	pek katılmıyorum	ne katılıyorum ne katılmıyorum	biraz katılıyorum	katılıyorum	kesinlikle katılıyorum
Mesleğim kişisel imajım için önemlidir	O	O	O	O	O	O	O
Bu mesleğe girmiş olmaktan pişmanım	O	O	O	O	O	O	O
Bu meslekte olmaktan gurur duyuyorum	O	O	O	O	O	O	O
(Meslek adı) olmayı sevmiyorum	O	O	O	O	O	O	O
Bu meslekle kendimi özdeşleştirmiyorum	O	O	O	O	O	O	O
Bu meslek bana heyecan veriyor	O	O	O	O	O	O	O
Şu anda bu mesleği değiştirmek için kendimden çok şey vermem gerekir	O	O	O	O	O	O	O
Şu anda meslek değiştirmek benim için zor olur	O	O	O	O	O	O	O
Eğer mesleğimi değiştirirsem hayatımda çok şey altüst olur	O	O	O	O	O	O	O
Şu anda mesleğimi değiştirmenin benim için maliyeti yüksektir	O	O	O	O	O	O	O
Mesleğimi değiştirmemi gerektiren hiçbir baskı unsuru yoktur	O	O	O	O	O	O	O
Şu anda mesleğimi değiştirmek hatırı sayılır derecede kişisel fedakarlık gerektirir	O	O	O	O	O	O	O
Bir mesleki eğitim almış kişilerin o meslekte makul bir süre kalma sorumluluğu duymaları gerektiğine inanıyorum	O	O	O	O	O	O	O
Bu meslekte kalmak için hiçbir yükümlülük hissetmiyorum	O	O	O	O	O	O	O
Mesleğime devam etme sorumluluğunu hissediyorum	O	O	O	O	O	O	O
Benim için avantajlı olsa da şu anda bu mesleği bırakmanın doğru olacağını hissetmiyorum	O	O	O	O	O	O	O
Bu mesleği terk edersem kendimi suçlu hissederim	O	O	O	O	O	O	O
Bu meslekteyim çünkü ona karşı bağlılık duyuyorum	O	O	O	O	O	O	O

VI. Aşağıda bir kurumun çalışanlarına olası desteği ile ilgili ifadelere verilmistir. Bu ifadelere katılma düzeyinizi 'kesinlikle katılmıyorum'dan 'kesinlikle katılıyorum'a uzanan ölçek üzerinde değerlendiriniz.

	kesinlikle katılmıyorum	katılmıyorum	pek katılmıyorum	ne katılıyorum ne katılmıyorum	biraz katılıyorum	katılıyorum	kesinlikle katılıyorum
Kuruluşum, amaçlarım ve değerlerimi büyük ölçüde dikkate alır	O	O	O	O	O	O	O
Bir sorunum olduğunda çalıştığım yerden yardım alabilirim	O	O	O	O	O	O	O
Kuruluşum, iyi olmama/sağlığıma gerçekten önem verir	O	O	O	O	O	O	O
Ne zaman özel bir desteğe ihtiyacım olsa kuruluşum yardıma hazırdır	O	O	O	O	O	O	O
Fırsat verildiği takdirde kuruluşum beni istismar eder	O	O	O	O	O	O	O
Kuruluşum benimle çok az ilgilenir	O	O	O	O	O	O	O
Kuruluşum benim fikirlerime değer verir	O	O	O	O	O	O	O
Kuruluşum, dürüstlük çerçevesinde yaptığım herhangi bir hatayı affeder	O	O	O	O	O	O	O
Kurluşum mesleki gelişimimle yakından ilgilenir	O	O	O	O	O	O	O
Mesleki bir problemim olduğunda kuruluşum yardım eder	O	O	O	O	O	O	O
Mesleki bir konuda özel eğitim gerektiğinde kuruluşum bana yardıma hazırdır	O	O	O	O	O	O	O
Kuruluşum mesleki uzmanlığımı kabul eder	O	O	O	O	O	O	O

Yaş: 20'den az ___ 21-25 ___ 26-30 ___ 31-35 ___ 36-40 ___ 41-45 ___ 46-50 ___ 50 üstü ____

Cinsiyet: Erkek ____ Bayan ____

Medeni durumunuz: Bekar____ Evli ____ Boşanmış ____ Diğer ____

Eğitim: Lise ___ Yüksekokul____ Üniversite ___ Yüksek Lisans ___ Doktora ___

Mezun oldugunuz üniversite: _____

Üniversiteden mezun olduğunuz bölüm: _____

Tam zamanlı iş tecrübesi (yıl sayısı): ____

Bulunduğunuz kurumda tam zamanlı iş tecrübesi (yıl sayısı): ____

Aylık gelir düzeyiniz: 500TL'den az ___ 500-1.000 TL ____ 1.000-2.000 TL ____ 2.000-3.000 TL ____

3.000-5.000 TL _____ 5.000-10.000 TL _____ 10.000 TL üstü _____

Appendix C. Hierarchical Moderated Regression Results for Helping and Sportsmanship Behaviors

Table 30 Moderated Regression Results for Predictors of Helping Behavior

Step	Predictor(s)	Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF
		β	SE	β	t	Sig.							
1	OPOS	.142	.043	.232	3.275	.001	.342	.314	_	11.939	.000	_	_
	Involvement Work Values	.183	.073	.164	2.514	.012							
	Social Work Values	.201	.069	.177	2.910	.004							
	Positive Affect	.264	.050	.284	5.326	.000							
	(Constant)	2.032	.556		3.652	.000							
2	Involvement Work Values	.375	.100	.335	3.742	.000	.378	.324	.036	6.925	.000	1.363	.169
	Social Work Values	.202	.086	.178	2.359	.019							
	Positive Affect	.255	.075	.274	3.409	.001							
	Occupation	-.148	.075	-.101	-1.970	.050							
	Occupation X Involvement Work Values	-.415	.151	-.240	-2.756	.006							
	Occupation X NA-I	.199	.094	.199	2.118	.035							
	(Constant)	2.953	.783		3.770	.000							

Durbin -Watson Value: 2.150

Results are reported only for the significant predictors in the two steps.

Table 31 Moderated Regression Results for Predictors of Sportsmanship Behavior

Step	Predictor(s)	Unstandardized Coefficients		Standardized Coefficients			R^2	Adj. R^2	ΔR^2	F	Sig. F	ΔF	Sig. ΔF
		β	SE	β	t	Sig.							
1	Affective Organizational Commitment	.136	.069	.137	1.969	.050	.271	.244	_	9.897	.000	_	_
	Normative Organizational Commitment	-.141	.065	-.149	-2.164	.031							
	NA-I	-.326	.083	-.246	-3.942	.000							
	NA-O	-.194	.093	-.131	-2.088	.038							
	(Constant)	2.578	1.005		2.566	.011							
2	NA-I	-.482	.120	-.364	-4.014	.000	.307	.255	.036	5.928	.000	1.458	.138
	Occupation X Involvement Work Values	-.666	.270	-.221	-2.467	.014							
	Occupation X NA-I	.359	.168	.207	2.134	.034							
	(Constant)	1.915	1.408		1.360	.175							

Durbin -Watson Value: 1.957

Results are reported only for the significant predictors in the two steps.

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