The Effect of Religiosity on Organizational Commitment through Work Values

Hüseyin Ekizler, Ph.D. *
Assist. Prof., Department of Business Administration, Faculty of Business Administration, Marmara University, Istanbul, Turkey, hekizler@marmara.edu.tr

Albina Galifanova
Marmara University, Istanbul, Turkey, albinagalifanova88@gmail.com

* Marmara Üniversitesi İşletme Fakültesi, Eğitim Mh. Fahrettin Kerim Gökay Cd. MÜ Göztepe Kampüsü, Göztepe, Kadıköy, İstanbul, Türkiye

ABSTRACT
Multitudinous studies conducted on organizational commitment and work values have emphasized a great significance of these concepts. In recent years considerable attention has also been accentuated on religiosity and its influence. The purpose of this study is to examine the impact of religiosity on organizational commitment through work values. Organizational commitment scale developed by Meyer and Allen (1991), religiosity scale developed by Hoge (1972) and work values scale developed by Elizur (1996) was used for measuring the variables. Data were collected by using convenience sampling technique through questionnaires from 261 participants employed in various companies located in Istanbul, Turkey. Results indicate that both intrinsic and extrinsic religiosity has a positive effect on work values. Also, these two dimensions of religiosity have a positive direct effect on continuance commitment, whereas normative commitment is positively affected by only intrinsic religiosity. Work values is found to be mediator of the relationship between extrinsic religiosity and continuance commitment. The findings extend current theories of the role of religion in working environment by examining the possible influence on work values.

Keywords: Religiosity, Intrinsic Religiosity, Extrinsic Religiosity, Work Values, Organizational Commitment

Ethical approval for this study was obtained from Marmara University Committee of Social Sciences Research Ethics with approval number 2020/15 (20.07.2020)
1. Introduction

For an organization to operate healthily and to prolong its existence it should use human resources, a crucial asset for organizations, effectively and efficiently. Each individual involves in an organization with diverse backgrounds, carrying and expressing a variety of norms, beliefs and values. An employee carries all these traits and reflects them intentionally or unintentionally in a workplace. An organization, therefore, becomes a place of amalgamation of multitude diversities that come together. Organizations that have an environment of integrity, where employees feel themselves as a part of one whole, most likely are expected to be progressive considering both business and human resources. Many antecedents have been found to play a huge role in increasing or decreasing organizational commitment. Numerous approaches and perspectives that have emerged over years contribute to new insights regarding commitment.

The importance of religion and its impact on individuals considering their behavior towards workplace have long been taken for granted. Nevertheless, many emerging studies suggest otherwise. It is highly anticipated that religious beliefs produce a specific background for the formation of ethical codes that are visible in individuals’ overall state of behavior. The studies also showed that there is a positive outcome in establishment of specific norms and values stemming from religiosity. Those norms and values also have a positive effect on organizational commitment. It is hard for an employee to leave her or his religious beliefs outside a workplace. Many researchers argue that the religious perspective of an employee is felt in a workplace (King & Williamson, 2005). As religious beliefs are part of our individualism, the effect on how one perceives work and to what extent feels obligation has been the question for an investigation in recent years. The effect of religiosity has been approached as a positive stimulus for work obligation (Parboteeah, Hoegl, & Cullen, 2009; Sagie, 1993); attitudes and behavior (King & Crowther, 2004; Kutcher, Bragger, Srednicki, & Masco, 2010; Sikorsa-Simmons, 2005; Wiever & Agle, 2002); job satisfaction (Vecchio, 1980); and organizational commitment (Olowookere, 2014).

Values are important tools in the work-life interface. An individual carries her or his prioritized values to a working environment where those values are reflected on specific work values. Work values have also been positively associated with organizational commitment (Kidron, 1978; Putti, Aryee, & Liang, 1989), job satisfaction (Froese & Xiao, 2012), corporate culture (Meglino, Ravlin, & Adkins, 1989) and organizational socialization (Dose, 1997). Knowing the insight of which values are meaningful it is possible to create a congruence between employees and management. Values are an integral element of shared organizational culture. To assist this culture to prosper it requires an understanding of the nature of work values, their types and how they fit together or contradict. Therefore, it makes possible to understand how people interpret various work aspects.
2. Literature Review

2.1. Organizational Commitment

Organizational commitment has been receiving considerable attention throughout the years. Its relationship with other fields has yielded a great amount of academic studies, especially in the field of management. Prior studies on organizational commitment offers a deep understanding of this extensively defined and measured concept.

Becker’s (1960) early work on his side-bet theory suggested behavioral perspective to commitment. According to Becker commitment emerges when side bets are made. An individual’s investments in an organization are the reasons for developing commitment since leaving the organization would result in losing these side-bets. Social confinements; impersonal structures; or adjusting to current social position are the circumstances under which one’s future actions become constrained. In other words, the individual continues particular behaviors that are consistent with accumulated investments and they are so valuable that turnover as a choice becomes an expensive outcome. This cost-associated approach was shared by Grusky (1966), Kanter (1968), Sheldon (1971), and Hrebiniak and Alutto (1972).

Kanter (1968) distinguished three types of commitment within social systems as continuance, cohesion, and control which are the linkages of personal commitment to the social commitment. Continuance commitment refers to a social system role; that one considers staying in an organization taking into consideration invested time and personal sacrifices. Therefore, the survival of the organization gains importance. Cohesion commitment refers to solidarity and harmony among group members within an organization. The social ties are significant values acquired by members through common goals. In control commitment, the acceptance of and obedience to rules are believed to be moral thus establishing certain norms. Those norms shape employees’ behavior that is congruent with demands of the authority and the obedience is a normative necessity.

Mowday, Porter, and Steers (1982) have provided an extensive theoretical and empirical work in organizational studies. One of the most popular measures of organizational commitment that was developed by Porter, Steers, Mowday, and Boulian (1974), is Organizational Commitment Questionnaire (OCQ) of 15 items that reflect three aspects of the definition. The definition includes believing and accepting organizational goals and values; showing enthusiasm to work for an organization; and exerting desire to stay in an organization. However, the definition and the measurement mostly focus on affective commitment. As the broader perspectives and different attachments emerged the scale and the definitions focus became narrow to comprise organizational commitment as a whole. Therefore, Mowday, Steers, and Porter (1979) distinguished organizational commitment having two approaches as attitudinal and behavioral. They explained behavioral expression of one’s commitment as to be “bound by his actions” or “behaviors that exceed formal and/or normative expectations” while attitudinal approach as “the identity of the person is linked to the organization” or “the goals of the organization and those of the individual become increasingly integrated or congruent”. Behavioral commitment as an outward expression represents costs that individual’s stake giving up other
alternatives and choosing to stay and become part of their organization. Attitudinal commitment represents a state in which individuals through identification of organizational goals and values are willing to stay in order to assist these goals and values. Both attitudinal and behavioral types of commitment are in a cyclical order, where attitudes have an impact on behaviors that reflect commitment and in return strengthening committing attitudes.

A broader set of connections have developed between an individual and commitment. Meyer and Allen distinguished three concepts of organizational commitment that encapsulates multiple forms of commitment. In attitudinal approach, the results of behaviors are expected to have an effect on the consistency or alteration in commitment. The main focus is on identifying antecedents that help developing commitment which comes out as a behavioral consequence. In behavioral approach, attitudes are shaped by behaviors that are expected to affect behaviors occurring in the future. The focus is on identification of conditions that lead to a behavior shape and repeat itself and the impact it generates on attitude change (Meyer & Allen, 1991). Meyer and Allen (1991) conceptualized the most commonly used classification in the literature on organizational commitment as affective, continuance and normative, considering these approaches as components, with various antecedents, not types, since an employee can experience all these commitments at once rather than individually. Employees who experience strong affective commitment stay in an organization because they “want” to, those with strong continuance commitment because they “need” to, and finally those with strong normative commitment because they “ought” to (Allen & Meyer, 1990). In affective commitment one attaches herself or himself to emotionally, identifies with and involves in an organization. It is their desire to remain rather than a requirement or an obligation. Among other scholars to share this orientation of commitment were Kanter (1968), Sheldon (1971), Buchanan (1974) and Mowday et al. (1982). In continuance commitment one is attached to an organization out of need. One is required to stay since there are valuable investments eventually ending up in paying high costs in case of turnover. Continuance commitment is related to the employee's desire to stay in the organization because of the rewards gained by staying in the organization or the loss of leaving the organization. Becker (1960) and Hrebiniak and Alutto (1972) also suggested cost-based orientation of commitment. In normative commitment one feels obliged to an organization. Normative commitment constitutes the responsibility and moral dimension of commitment in the organization and reflects the employees' sense of obligation to continue to stay in the organization. The commitment of the employee to her or his institution depends on her or his social responsibility awareness and perception of staying in the organization as a duty. Wiener and Gechman (1977) also viewed commitment as a moral responsibility toward an organization.

Theoretical and empirical work done so far have evaluated antecedents and outcomes of organizational commitment and suggested important linkages with employee behaviors. The studies have shown that the level of commitment to an organization has direct effect on the level of tardiness and absenteeism (Blau, 1986; Porter et al, 1974; Steers, 1977), burnout (King & Sethi, 1997), and turnover (Mathieu & Zajac, 1990; Steers, 1977). The antecedents and outcomes of organizational commitment also have generated a wide variety of topics. The antecedents like age (Hrebiniak,
Religiosity and the extent of inner religiosity have long been investigated on various outcomes of social life and interaction. Religion is an important personal factor that has effects on the way people view their work (Davidson & Caddell, 1994), how people perceive work norms (Saige, 1993), attitudes and behavior (King & Crowther, 2004), values (Schwartz & Huismans, 1995), job satisfaction (King & Williamson, 2005; Veechio, 1980), career development (Duffy, 2006) and work stress coping (Barhem, Younies, & Muhamad, 2009). An individual expresses religiosity in various different ways. For instance, the doctrines and teachings in main religions like Islam, Christianity, Judaism, Hinduism or Buddhism, create the basis for morally right behaviors since they state divine rules to which believers attach themselves. These attitudes and behaviors are visible in day-to-day life and in working conditions. As many studies have shown religion as a social identity is felt in the workplace and may change how a person views her or his duty.

In their study conducted in Protestant and Catholic congregations, Davidson and Caddell (1994) examined the effect of religious factors that contributed to respondents view their work not only as a job or a career but as a duty as well. Even some respondents especially with rewarding jobs were inclined to view their work in holy terms. King and Crowther (2004) asserted that organizations are affected by employees’ attitudes and behaviors that are greatly influenced by their religiosity and spirituality. Similarly, Farrukh, Ying, and Ahmed (2016) stated that religious people tend to be high in moral sense influencing their attitudes, behaviors, and actions which positively affect organizational commitment.

2.1.1. Intrinsic and Extrinsic Religiosity

Allport (1966) pointed out that considering church attendance religious people differed as regular attendants and irregular attendants. The reason for regularity and devotion in the study was described as personal motives and attitudes giving examples from Protestants and Catholics. The former tends to attend the church less than the latter. In order to clarify these differences between two groups, the author suggested using intrinsic and extrinsic values which people attach to their religious orientations. Intrinsic form of the religiosity has the ultimate meaning for the believer. Intrinsically motivated people find their main motives in religion itself. Other worldly needs and desires are of secondary importance which are in harmony and congruence with their religious beliefs. Extrinsic form of religiosity, on the other hand, is functional and instrumental. For extrinsically oriented people religion is useful to get what they want which involves self- interests such as safety or relief. People who are extrinsically motivated tend to use religion for their own ends. In their study Allport and Ross (1967) explained an extrinsically motivated person as the one who “uses” her or his religion and intrinsically motivated person as the one who “lives” her or his religion. Allport and Ross used their Religious Orientation Scale with extrinsic and intrinsic subscale items, the scale which would become one of the most used laying foundation for religious scales to emerge afterwards.
2.1.2. Religion at Work

If one’s religious beliefs are close to an organization’s overall values, then one is liable to stick to that organization more. An organization should shape its values according to the workers’ beliefs in order to increase productivity. Managers should create a melting pot for diversity in order to create coherence.

Adams and Csiernik (2002) in their study on spirituality in workplace made a conclusion with a following definition as “workplace spirituality involves positively sharing, valuing, caring, respecting, acknowledging, and connecting the talents and energies of people in meaningful goal-directed behavior that enables them to belong, be creative, be personally fulfilled, and take ownership in their combined destiny” which perfectly encapsulates the nature of the meaning and the role spirituality plays considering workplace.

King and Williamson (2005) in their study empirically showed that a person can’t leave out her or his religious beliefs at the door of a workplace. Further the study demonstrated that religious people wanted to express their religious beliefs in their workplace. Therefore, religiosity becomes a significant expression for employees’ desires and expectations.

Barhem et al. (2009), conducted a study on Muslim employees’ level of religiosity and its relationship with stress coping. The existence of evidence that religious dimensions positively affected employees, trying to cope with stress at work, indicates that further researches should be conducted in this area.

Gyekye and Haybatollahi (2012) with their research on workers associated with Christianity, Islam and Traditional African Religion, revealed that there is an integration of religious beliefs and practices in workplace. Workers who regularly participated in religious activities were found to be favoring organizational behavior more than non-attendant less religious workers.

Many studies have found that religiosity is a positive predictor of organizational commitment. Olowookere (2014) stated an influential side of intrinsic religiosity on affective commitment, while extrinsic commitment was found to affect continuance and normative commitment. Sikorsa-Simmons (2005) also in her study, conducted in caring organization, included religiosity in demographics as an antecedent of organizational commitment and job satisfaction, yielding positive relationships. Kutcher, Bragger, Srednicki, and Masco (2010) in their study demonstrated that religiosity have a great impact on commitment, work stress coping and job satisfaction.

Duffy (2010), explored in his study the effect of intrinsic religiosity and spirituality on work values. Even though the weak impact was established between religiosity and work values compared to spirituality, the study established implications for further positive outcomes.

Parboteeah et al. (2009) analyzed cognitive context of religiosity which is considered as a personal or private religious belief, referring to the dimension of knowing the religion; and normative context of religiosity considered in terms of attending congregations, institutions carrying out religious practices, referring to the dimension
of living the religion. They also stated that religion creates a positive contextual environment linking to work obligations.

H1: Religiosity has a positive and significant effect on work values.

2.2. Work Values

Plenty of definitions has been suggested for the concept of value. The most cited ones are by a culturalist Hofstede (1984), whose cultural dimensions theory became a framework for cross-cultural communication, defined value as “a broad tendency to prefer certain states of affairs over others.” Super (1980) defined a value as “an objective, either a psychological state, a relationship, or material condition, that one seeks to attain”. Rokeach (1968a) defined value as an “enduring belief that a particular mode of conduct or that a particular end-state of existence is personally and socially preferable to alternative modes of conduct or end-states of existence”. Rokeach’s definition suggests that value is a criterion that influences our every-day life and differs from attitudes in that they are stable while attitudes are enduring but liable to change depending on a set of circumstances. Our values determine our acts, desires, needs, attitudes, behaviors and judgements. Rokeach (1968b) states that values are instrumental and terminal. An instrumental value is a mode of behavior, a single belief like honesty or courage that is personal and socially preferable in all situations with respect to all subjects. Terminal value is the final phase of reaching an objective like beliefs in peace and equality that is personally and socially is worth striving for. In order to reach the end-state of existence that is terminal value, an individual uses instrumental values as means. An individual internalizing values consciously or unconsciously makes them standardized determinants for the actions, attitudes and behaviors, morals, justifications and judgments. Value is a single belief enabling us to go beyond in our stance regarding situations or objects.

Over the years a considerable research has been dedicated to the values and their relation to work. Work, in many areas and stages of our lives plays a huge role as being a place of social interaction; source of our income; and social status indicator. Work values, therefore, should be considered more specifically taking into account various aspects.

Researchers have tried to define work values, yet each definition differs. According to Pennings (1970), work values are a group of similar attitudes and opinions through which an employee makes assessments regarding work and work environment and they can be intrinsic and extrinsic. Similarly, Dose (1977) included that by anticipating what is ‘right’ and assessing the importance of preferences an individual evaluates the standards of work and work environment. Meglino et al. (1989), stated that values are stable individual characteristics. Zytowski (1970) who stated that the concept of work value represents individual’s internal state of need or reward or satisfaction that is achievable, defines work values as “a set of concepts which mediate between the person’s affective orientation and classes of external objects offering similar satisfactions”.

Roe and Ester (1999) state that work values are more specific than general values. However, there are two assumptions that can be derived from many scholars’ work. The first one is that work values have similarity with general values as they are part of a cognitive structure. The second assumption is that work values are produced by
general values. There is also a possible relationship between general values and work values which allows alternatively to conclude that work values are also the source for general values. In modern societies work values are basic, influential and noticeable. Moreover, work values indirectly influence people’s activities through goals and attitudes making them motivators for people’s actions.

Ros, Schwartz, and Surkiss (1999) define work values as beliefs applying to desirable stages like high wage or favorable working conditions. People make choices among alternatives that are more favorable and generate means for achieving goals. Therefore, individuals classify the importance of work-related values. Work values are more specific than individual values and are verbally stated and communicated among individuals and groups. Work value or work values may be related to the work itself or may also be related to the values of the people who do the work. The value of work to individuals is a specific reflection of the personal values of people. Work value is the practical application of the individual's lifestyle. However, work value has a wide range because it is related to an individual's own values. This range includes the approaches, views and expectations of individuals as well as the quality, potential and attractiveness of the work (Ros et al., 1999).

Similarly, Johnson (2005) defines work values as desires related to work features that lead to potential rewards like payment, various social opportunities and prestige.

2.2.1. Two Facets of Work Values

Elizur proposed that the value of a group is an entity that has the upmost importance for this particular group. Work values domain was systematically and empirically tested through facet theory (Elizur, 1970, 1984; Elizur & Guttman, 1976; Elizur & Shye, 1990). Borg (2005) explained facet theory as “a methodology of an extension of methods for the design and analysis of experiments”. In social sciences, observations, firstly are designed through establishing facets. Facets are variables that help classify objects into various classes. In order to be able to relate facets to one another and make clear what their roles are, a mapping sentence is used. This is a device that organizes a domain of research questions. Work values are multivariate concepts, therefore specifying each items’ domain is crucial to understand the nature of work values. Elizur’s radex structure offers embedded circumplexes. Instrumental, cognitive and affective outcomes are placed on each wedge of a circular sector and on a concentric ring of a radex. Concentric ring corresponds to rewards that are placed in the innermost part of the ring representing individual performance and resources that are placed on the outermost part of the ring representing collective performance.

Elizur (1984) through a radex structure, a combination of simplexes and circumplexes, analyzed the structural relationship of work values, obtaining two facets of definitions. Facet A was determined as modality of outcome while Facet B was determined as the outcome-performance relation.

Elizur (1984) described this facet of work values to be as of material nature. Outcomes like pay are applied directly, while others like benefits are direct practical outcomes. This side of outcomes is called instrumental. Elizur (1996) describes outcomes of instrumental nature as “the external nature of this class of outcomes rather than the internal nature of other modalities”. Security, convenient hours and work conditions are among instrumental outcomes. Second class of outcomes are
not of material use and they are not noticeable as instrumental outcomes but they exist as social interaction. Interpersonal relations like relations with colleagues or supervisors are labeled as affective outcomes. Other items are recognition, esteem and interaction. The last class of outcome is cognitive representing the psychological side of outcomes. Advancement, status, achievement, meaningful work, or personal growth are examples for cognitive work outcomes.

Management tries to motivate their employees to be a part of an organization and to perform their work efficiently. Elizur (1984) defined the second facet as relation to task performance in terms of encouragements like benefit plans or transportation as resources provided by organizations. Other outcomes that are provided after the task is achieved are called rewards and include outcomes such as status, pay or advancement.

### 2.2.2. Work Values and Commitment

An organization is a place of diverse workforce. Many studies have shown how and to what extend work values affect organizational commitment. Putti et al. (1989), evaluated the relationship between work values and organizational commitment in the Asian context. Factor analysis resulted in two factors. First factor was composed of work values like pride in work, job involvement, activity preference and upward striving. They called these values as intrinsic work values. The second factor consisted of social status and attitude toward earnings which they called as extrinsic work values. A strong effect was found between intrinsic work values and organizational commitment, while extrinsic work values yielded weak effect.

Kidron (1978), investigated whether work values affected two types of organizational commitment, moral and calculative. The results indicated a positive relationship between work values and moral commitment, while a negative relationship was found with calculative commitment. Moral commitment one’s attachment in terms of values and goals were much more important than a transactional, calculative side of commitment.

Meglino et al. (1989), examined the relationship between value congruence and individual outcomes. Job satisfaction and organizational commitment were found to be higher in workers whose values were congruent with their supervisors. Elizur (1996), analyzed work values’ effect on commitment in Israeli context. He found that cognitive work values moderately affected commitment, while instrumental pay value was the only item to show a positive relation to commitment.

**H2:** Work values have a positive and significant effect on organizational commitment.

**H3:** The effect of religiosity on organizational commitment is mediated by work values.

The conceptual research model regarding to the hypothesis is presented in Figure 1.
3. Data and Methodology

3.1. Survey and Data
Sample was collected from 261 participants who hold different job status and various tenure, including part-time employees employed in different companies located in Istanbul, Turkey. Participants were asked for their voluntary participation and data collection was based on a voluntary survey method by using Google Forms Survey tool.

3.2. Survey Instruments
Organizational commitment is measured by the scale developed by Meyer and Allen (1991), consisting of 18 items. Three sub-dimensions of organizational commitment affective, normative and continuance commitment are comprised of 6 items each.

Religiosity scale was developed by Hoge (1972). Dean Hoge extracted 10 items from 30 items scale which consisted of 9 items of Allport and Ross’s scale and 21 items of Feagin’s scale. Extracted 10 items were found to be highly validated, reliable and highly correlated. Out of 10 items three of the items implied extrinsic motivation.

Work values of 24 items scale was developed by Elizur (1996). First 11 items of the scale were based on Jurgensen’s (1978) questionnaire. These 11 items were categorized according to the facets as instrumental, affective and cognitive. Elizur in his second questionnaire increased the number of items and adjusted some of the items to be able to reach a wider range of responses. Therefore, 21 items were comprised (Elizur, 1984). Three more items were introduced later in 1996 as feedback and personal growth for cognitive and interaction for affective work values.

5-point Likert scale was used for measurement of organizational commitment and religiosity items. The scale ranged from 1=Strongly disagree, to 5=Strongly agree. Work values items were measured again on a 5-point Likert scale ranged from 1=Absolutely unimportant to 5=Absolutely important.

4. Research Findings
Of 261 participants, 131 subjects (50.2%) were female and 130 subjects (49.2%) were male. 112 of participants were married (42.9%), while single participants consisted of 149 (57.1%). Education level of the sample consists of four groups determined as high school and less, bachelor, master’s degree and doctorate. The majority held bachelor’s degree with 154 (59%) participants. Regarding income level, most of the participants had 2021-4000 TL income level with 111(42.5%). The participants’ ages
ranged from 19 to 72 with a mean of 33.1 years and standard deviation of 9.2 years. Table 1 shows the distribution of demographic profile of participants.

| Gender      | Frequency | Percentage |
|-------------|-----------|------------|
| Female      | 131       | 50.2       |
| Male        | 130       | 49.8       |

| Marital Status | Frequency | Percentage |
|----------------|-----------|------------|
| Married        | 112       | 42.9       |
| Single         | 149       | 57.1       |

| Education Level | Frequency | Percentage |
|-----------------|-----------|------------|
| High school and less | 36 | 13.8       |
| Bachelor’s Degree     | 154     | 59.0       |
| Master’s Degree       | 53       | 20.3       |
| Doctorate            | 18        | 6.9        |

| Income Level | Frequency | Percentage |
|--------------|-----------|------------|
| 2020 TL and less      | 36        | 13.8       |
| 2021-4000 TL           | 111       | 42.5       |
| 4001-6000 TL           | 45        | 17.2       |
| 6001-8000 TL           | 19        | 7.3        |
| 8001 TL and more       | 50        | 19.2       |

| Total                | 261       | 100        |

| Age [19, 72] | Mean | Std. Dev. |
|--------------|------|-----------|
|              | 33.1 | 9.2       |

4.1. Exploratory Factor Analyses

Exploratory factor analyses were performed for each of the scale used in the study. Organizational commitment was extracted into three factors. Seven of the items with low factor loading were excluded. Kaiser-Mayer-Olkin (KMO=0.799) and Bartlett’s (p=0.000) test yielded adequate levels indicating the appropriateness for factor analysis. As stated in Table 2, three dimensions of organizational commitment; affective, continuance and normative, explained 64.35% of the total variance. According to reliability results, internal consistency of the items was found to be satisfactory.

| Constructs and Items               | Factor Loading | Variance Explained | Reliability |
|------------------------------------|----------------|--------------------|-------------|
| Organizational Commitment          |                |                    |             |
| Affective Commitment               |                |                    |             |
| I feel a strong sense of belonging to my organization. | 0.845         | 21.545             | 0.777       |
| I feel “emotionally attached” to this organization. | 0.811         | 21.412             | 0.773       |
| I feel like “part of the family” at my organization. | 0.789         | 21.412             | 0.773       |
| Continuance Commitment             |                |                    |             |
| It would be very hard for me to leave my organization right now, even if I wanted to. | 0.864         | 21.412             | 0.773       |
| If I had not put so much of myself into this organization, I might consider working elsewhere. | 0.717         | 21.295             | 0.762       |
| Right now, staying with my organization is a matter of necessity as much as desire. | 0.665         | 21.295             | 0.762       |
| Normative Commitment               |                |                    |             |
| This organization deserves my loyalty. | 0.852         | 21.295             | 0.762       |
| I would feel guilty if I left the organization now. | 0.740         | 21.295             | 0.762       |
| I would not leave my organization right now because I have a sense of obligation to the people in it. | 0.733         | 21.295             | 0.762       |
| I owe a great deal to my organization. | 0.574         | 21.295             | 0.762       |

KMO=0.799 Bartlett Test: χ²(55)=1003.362, p=0.000

Table 2. EFA of Organizational Commitment

Table 3 demonstrates religiosity construct which was separated into two factors. The first factor consisted of seven items which converged under intrinsic religiosity and three items under extrinsic religiosity. The reason for the emerging second factor is that respondents conceived these three items as extrinsic orientation of religiosity.
As was stated earlier, Hoge (1972) included in his study that three of the items were extrinsically motivated. Henceforth, the emerging factor name was changed into extrinsic religiosity. KMO (0.891) was found to be adequate and Bartlett’s test result was statistically significant (p=0.000), indicating the appropriateness for factor analysis. Intrinsic Religiosity is found to be consistent with Cronbach’s Alpha (α=0.922).

However, for Extrinsic Religiosity Cronbach’s Alpha (α=0.670) was found to be less than value 0.70. According to Durmus et al. (2018) if a number of items are few, (α=0.60) value and more is acceptable.

| Construct and Items | Factor Loading | Variance Explained | Reliability |
|---------------------|----------------|-------------------|-------------|
| Religiosity         |                |                   |             |
| Intrinsic Religiosity |               |                   |             |
| One should seek God’s guidance when making every important decision | 0.866 | 48.788 | 0.922 |
| My religious beliefs are what really lie behind my whole approach to life | 0.864 | | |
| I try hard to carry my religion over into all my other dealings in life | 0.841 | | |
| In my life, I experience the presence of the Divine (i.e., God) | 0.838 | | |
| My faith involves all of my life | 0.834 | | |
| My faith sometimes restricts my actions | 0.781 | | |
| Nothing is as important to me as serving God as best as I know how | 0.745 | | |
| Extrinsic Religiosity |               |                   |             |
| Although I believe in religion, I feel there are many more important things in life | 0.864 | 18.965 | 0.670 |
| Although I am a religious person, I refuse to let religious considerations influence my everyday affairs | 0.717 | | |
| It does not matter so much what I believe as long as I lead a moral life | 0.665 | | |

KMO=0.891  Bartlett Test: $\chi^2(45)=1443.338$, p=0.000

Table 3. EFA of Religiosity

Work values were extracted to one factor as unidimensional for 24 items of work values contrary to the expectations of three factors as to be cognitive, affective and instrumental. KMO (0.969) and Bartlett’s test yielded adequate level of significance (p=0.000).

Factor analysis for religiosity resulted in emerging two factors; intrinsic and extrinsic religiosity. Three subgroups of work values were conceived as one factor. Lastly, factor analysis for organizational commitment collected the items in three factors. The modified research model is stated in Figure 2.

Figure 2. Modified Research Model

Based on the revised research model, former hypotheses were modified. As modified research model states in Figure 2 modified hypotheses are as follows;

- **H1.1: Intrinsic religiosity has a positive effect on work values.**
H1.2: Extrinsic religiosity has a positive effect on work values.

H2.1: Work values has a positive effect on affective commitment.

H2.2: Work values has a positive effect on continuance commitment.

H2.3: Work values has a positive effect on normative commitment.

| Construct and Items       | Factor Loading | Variance Explained | Reliability |
|---------------------------|----------------|--------------------|-------------|
| Work Values               |                |                    |             |
| Esteem                    | 0.909          |                    |             |
| Feedback                  | 0.903          |                    |             |
| Achievement               | 0.902          |                    |             |
| Personal growth           | 0.891          |                    |             |
| Work influence            | 0.891          |                    |             |
| Supervisor                | 0.888          |                    |             |
| Responsibility            | 0.883          |                    |             |
| Work conditions           | 0.880          |                    |             |
| Benefits                  | 0.878          |                    |             |
| Organizational influence  | 0.862          |                    |             |
| Co-workers                | 0.852          |                    |             |
| Contribution to society   | 0.845          |                    |             |
| Security                  | 0.844          |                    |             |
| Status                    | 0.839          |                    |             |
| Use of abilities          | 0.826          |                    |             |
| Company                   | 0.823          |                    |             |
| Convenient hours          | 0.808          |                    |             |
| Advancement               | 0.803          |                    |             |
| Interaction               | 0.802          |                    |             |
| Pay                       | 0.788          |                    |             |
| Independence              | 0.774          |                    |             |
| Meaningful Work           | 0.721          |                    |             |
| Job interest              | 0.720          |                    |             |
| Recognition               | 0.709          |                    |             |

KMO=0.969 Bartlett Test: $X^2(276)=7374.006$, $p=0.000$

Table 4. EFA of Work Values

4.2. Hypotheses Testing

As it is stated in Table 5, intrinsic (0.224) and extrinsic (0.285) religiosity show linear correlation with work values. A weak correlation is demonstrated with continuance commitment (0.177). Affective commitment and normative commitment showed no correlation with work values.

|                          | Mean | 1    | 2    | 3    | 4    | 5    | 6    |
|--------------------------|------|------|------|------|------|------|------|
| Affective Commitment (1) |      | 3.065|      |      |      |      |      |
| Continuance Commitment (2)|  2.764| 0.078" | 1    |      |      |      |      |
| Normative Commitment (3) |  2.887| -0.069| 0.524"| 1    |      |      |      |
| Intrinsic Religiosity (4) |  2.998| 0.053 | 0.319"| 0.255"| 1    |      |      |
| Extrinsic Religiosity (5) |  3.144| 0.083 | 0.131"| 0.078 | -0.131"| 1    |      |
| Work Values (6)          |  4.261| -0.024| 0.177"| 0.104 | 0.224"| 0.285"| 1    |

Note:*p<0.05, **p<0.01

Table 5. Means and Correlations

Series of multiple regression analysis was performed to measure the impact of independent variables on dependent variables. Intrinsic religiosity and extrinsic religiosity had a direct significant effect on work values ($R=0.389$, $R^2=0.150$, $p=0.000$). Both intrinsic religiosity ($\beta=0.266$) and extrinsic religiosity ($\beta=0.320$) were found to have positive weak direct effect on work values, supporting $H_{1.1}$ and $H_{1.2}$.
The proposed positive effects of intrinsic religiosity ($\beta=0.342$) and extrinsic religiosity ($\beta=0.176$) on continuance commitment was found as statistically significant ($R=0.363, R^2=0.132, p=0.000$), only intrinsic religiosity ($\beta=0.270$) was found to have a positive direct effect on normative commitment ($R=0.255, R^2=0.065, p=0.000$), partially supporting $H_2$. Work values ($\beta=0.225$) was found to have a direct positive effect only on continuance commitment ($R=0.177, R^2=0.031, p=0.000$), supporting $H_{2.2}$. However, no statistically significant effect was found on other components of organizational commitment.

| Variables | $\beta$ | Std. $\beta$ | $t$ | $R$ | $R^2$ | $F$ |
|-----------|---------|--------------|-----|-----|-------|-----|
| Dependent: Work Values |
| Intrinsic Religiosity | 0.187 | 0.266 | 4.603* | 0.389 | 0.150 | 22.966 |
| Extrinsic Religiosity | 0.238 | 0.320 | 5.535* | |
| Dependent: Continuance Commitment |
| Intrinsic Religiosity | 0.306 | 0.342 | 5.847* | 0.363 | 0.132 | 19.636 |
| Extrinsic Religiosity | 0.166 | 0.176 | 3.002* | |
| Dependent: Continuance Commitment |
| Work Values | 0.225 | 0.177 | 2.886* | 0.177 | 0.031 | 8.330 |
| Dependent: Normative Commitment |
| Intrinsic Religiosity | 0.226 | 0.255 | 4.237* | 0.255 | 0.065 | 17.955 |

*Note:* $p<0.01$

Table 6. Results of Regression Analyses

The direct effect of extrinsic religiosity on continuance commitment was tested. In order to investigate the indirect effect of extrinsic religiosity on continuance commitment through work values, Hayes’ PROCESS macro (5000 bootstrap samples, Model 4) was performed. As a result, at 95% CI significant indirect effect of extrinsic religiosity (ab=0.043, SE=0.02, [0.005, 0.087]) was revealed. Extrinsic religiosity led to higher work values (a=0.285, SE=0.44) which in turn positively affected continuance commitment (b=0.152, SE=0.081). After controlling for mediator of work values extrinsic religiosity (c=0.088, SE=0.06, p=0.171) was no longer a significant predictor of continuance commitment, supporting full mediation.

5. Conclusion

Several conclusions emerged in this study. The first and second hypotheses demonstrated that intrinsic and extrinsic religiosity were positively related to work
values. First two hypotheses were supported. Multiple regression analysis also yielded weak results. Similarly, a weak impact was found in the study conducted by Duffy (2010). Only “influence” work value was weakly effected by religion. Davidson and Caddell (1994), found out that members of Protestants and Catholics congregations viewed work as a job rather than calling when work related values like costs, benefits, job security and rewards were few. Religious considerations played insignificant role in viewing work as more than a job. Moreover, Parboteeah et al. (2009) supported their hypothesis of positive association between cognitive and normative elements of religion and work obligation and work values. Sav (2016), supported the hypothesis of beneficial and positive relationship of religiosity and work-life facilitation. In Gyekye and Haybatollahi’s (2012) study, industrial workers affiliated with religiosity were found to be strongly incorporated with work values.

The hypothesis predicting a positive relationship between work values and affective commitment was not supported. Similarly, Froese and Xiao (2012), in their study showed that values did not have any direct effect on affective organizational commitment. Kidron (1978), on the other hand, found out a positive relationship between work values and affective commitment, suggesting that moral identification is more associated with value orientation of an individual. Meyer, Irving, and Allen (1998) found that experience value was stronger on affective reactions of employees towards their organizations, as congruence between employees’ own work-related experiences and experiences of supervisors was high.

A positive relationship was found between work values and continuance commitment. The amount of variance explained was higher than explained in affective commitment. Meyer et al. (1998) likewise, found that employees, who placed greater importance on comfort-related value which includes item of security, were likely to have greater continuance commitment than affective and normative commitments. Abbott, White, and Charles (2005), however, demonstrated a positive relationship between work values and affective and normative commitment, stating that employees tend to build affective and normative organizational commitment through connecting their own individual values to their organization’s values that they are part of. They found no consistent relationship regarding continuance commitment and work values.

Estimation of indirect effect of religiosity on organizational commitment through work values as mediator was evaluated as well. The model was suggested establishing two pathways which influence organizational commitment by direct and indirect effects. Extrinsic religiosity was found to have a direct effect on continuance commitment. As a result of analyses after controlling for mediator of work values, extrinsic religiosity was no longer a significant predictor of continuance commitment, supporting full mediation of work values.

Affective commitment as Porter states, is related with goal congruence between an individual and an organization. Meyer and Allen state that affective commitment implies the desire to stay in an organization. Considering these characteristics of this type of commitment, and the fact that no positive relationship was established in this study, it is possible to conclude that whether people are not satisfied with their current jobs or their work values are not satisfactory enough. Normative commitment which implies duty and moral responsibility towards an organization was not affected
by work values. Again, the assumption that employees’ needs and particular values are not satisfied is quite probable. The only component that could establish a positive impact is continuance commitment. Considering high living costs, tough economic conditions and high competition this bearing is meaningful. People realizing the costs upon leaving their jobs, stay in an organization for stable income. It is also important to note that the time and personal sacrifices are equally important for an employee to stay in an organization.

In order to keep pace with a constantly changing world it is inevitable for organizations especially multi-national ones to survive and compete with rivals. In business life mechanical and traditional rules are destroyed or replaced with more open and flexible ones. In order to integrate individuals into organizations fully every demographic characteristic be it visible like gender and race or invisible like religion and sexual orientation should be encouraged for expression. The empirical analyses revealed in this study, that both intrinsic and extrinsic religiosity have positive effect on work values. Even though these effects are weak, it is important to state that religion still being a taboo and a sensitive subject, is felt and visible in the working environment. Organizations should take into consideration their employees’ religious and spiritual affiliations since, as many researches stated, it is positively connected with job satisfaction and commitment.

Work values differentiate for every individual. They stem from our basic individual values shaping our attitudes and behaviors with major implications for our social life and interaction with others. Work-life balance and work-life interface are parts of our lives. Work values, therefore are significant and pertinent. Through work values employees determine their jobs, career paths, working conditions and work environment. As many studies suggest, work values shape an employee’s level of commitment. Management reflects organizational values to their employees. Therefore, determining values that an employee puts on a top priority is important to create congruence between managerial and employees’ values. Organizations through these values can determine shortcomings and needs which play a significant role in outcomes like involvement, satisfaction and commitment.

This research should be considered with its limitations. The most important obstacle faced was the bias and hesitancy to religiosity scale questions from the respondents. Some participants refused to answer the questions on the grounds of personal violation. Moreover, three items were inadequate to measure extrinsic orientation of religiosity. The lack of diversity of religions and races is another limitation. Future studies should take into account religious diversity as well.

Earlier studies mostly investigated the relationship between work values and affective commitment and only recently emerging studies focus on different types of commitment. As was found in this study, work values was found to have an impact on continuance commitment, but no impact was found on affective and normative commitments. A further study can be conducted to find out which particular work value items are prioritized and how they are connected with continuance commitment which implies investments of employees and what possible implications work values might have on affective and normative commitments.

Furthermore, this survey was limited to one city as participants are employees in organizations based in Istanbul, Turkey. In order to demonstrate the construct and
discriminant validity of the samples the survey should be implemented in different regions of Turkey. Since every region shows varieties considering conservatism, organizational settings, traditional and cultural values it may likely provide a greater understanding of the concepts and their relationship. Moreover, future studies with different samples for religiosity, work values and organizational commitment may be applied. Sample differences may account for differences between the current study and studies in related fields. Future research should focus on longitudinal research collecting data from multiple sources. It may also be useful to examine how different types of commitment and work values develop and change for newly recruited employees and senior employees considering their religious affiliations.

References

Abbott G. N., White F. A., & Charles M. A. (2005). Linking Values and Organizational Commitment: A Correlational and Experimental Investigation in Two Organizations. *Journal of Occupational and Organizational Psychology, 78*, 531-551.

Adams, D. W., & Csiernik, R. (2002). Seeking the lost spirit: Understanding Spirituality and Restoring it to the Workplace. *Employee Assistance Quarterly, 17*(4), 31-44.

Allen N. J., & Meyer J. P. (1990). The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization. *Journal of Occupational Psychology, 63*, 1-18.

Allport G. W. (1966). The Religious Context of Prejudice. *Journal for the Scientific Study of Religion, 5*(3), 447-457.

Allport, G. W., & Ross, J. M. (1967). Personal Religious Orientation and Prejudice. *Journal of Personality and Social Psychology, 5*, 432-443.

Barhem B., Younis H., & Muhamad R. (2009). Religiosity and Work Stress Coping Behavior of Muslim Employees. *Education, Business and Society: Contemporary Middle Eastern Issues, 2*(2), 123-137.

Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology, 66*, 32-42.

Blau J. G. (1986). Job Involvement and Organizational Commitment as Interactive Predictors of Tardiness and Absenteeism. *Journal of Management, 12*(4), 577-584.

Borg, I. (2005). Facet Theory. *Encyclopedia of Statistics in Behavioral Science, 2*, 595-599.

Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly, 19*, 533-546.

Cohen, A. (1993). Age and Tenure in Relation to Organizational Commitment: A Meta-Analysis. *Basic and Applied Social Psychology, 14*(2), 143-159.

Davidson J. J., & Caddell P. D. (1994). Religion and the Meaning of Work. *Journal for the Scientific Study of Religion, 33*(2), 135-147.

Dose J. J. (1997). Work Values: An Integrative Framework and Illustrative Application to Organizational Socialization. *Journal of Occupational and Organizational Psychology, 70*, 219-240.

Duffy, R. D. (2006). Spirituality, Religion, and Career Development: Current Status and Future Directions. *The Career Development Quarterly, 50*, 52-63.

Duffy, R. D. (2010). Spirituality, Religion, and Work Values. *Journal of Psychology and Theology, 38*(1), 52-61.

Durmus B., Yurtkoru E. S., & Çinko M. (2018). *Sosyal Bilimlerde SPSS ile Veri Analizi* (7. Baskı). İstanbul: Beta Basım Yayın Dağıtım A.Ş.

Elizur, D. (1970). *Adapting to Innovation: A Facet Analysis of the Case of the Computer*. Jerusalem: Jerusalem Academic Press.

Elizur, D. (1984). Facets of Work Values: A Structural Analysis of Work Outcomes. *Journal of Applied Psychology, 69*(3), 379-389.

Elizur, D. (1996). Work Values and Commitment. *International Journal of Manpower, 17*(3), 25-30.

Elizur, D., & Guttmann L. (1976). The Structure of Attitudes toward Work and Technological Change within an Organization. *Administrative Science Quarterly, 21*(4), 611-622.
Elizur, D., & Shye S. (1990). Quality of Work Life and its Relation to Quality of Life. *Applied Psychology: An International Review, 39*(3), 275-291.

Farrukh, M., Ying, C. W., & Ahmed, N. O. (2016). Organizational Commitment: Does Religiosity Matter?. *Cogent Business & Management, 3*, 1-10.

Froese, F. J., & Xiao S. (2012). Work Values, Job Satisfaction and Organizational Commitment in China. *The International Journal of Human Resource Management, 23*(10), 2144-2162.

Grusky, D. (1966). Career Mobility and Organizational Commitment. *Administrative Science Quarterly, 10*(4), 488-503.

Gyekye S. A., & Haybatollahi M. (2012). Workers’ Religious Affiliations and Organizational Behavior: An Exploratory Study. *International Journal of Organizational Behavior, 17*(4), 1-18.

Hofstede, G. (1984). The Cultural Relativity of the Quality of Life Concept. *Academy of Management Review, 9*, 389-398.

Hoge, D. R. (1972). A Validated Intrinsic Religious Motivation Scale. *Journal for the Scientific Study of Religion, 11*, 369-376.

Hrebiak, L. G. (1974). Effects of Job Level and Participation on Employee Attitude and Perception of Influence. *Academy of Management Journal, 17*, 469-662.

Hrebiak, L. G., & Alutto J. A. (1972). Personal and Role-Related Factors in the Development of Organizational Commitment. *Administrative Science Quarterly, 17*(4), 555-572.

Johnson, M. K. (2005). Family Roles and Work Values: Process of Selection and Change. *Journal of Marriage and Family, 67*, 352-369.

Jurgensen, C. E. (1978). Job preferences (What makes a job good or bad?). *Journal of Applied Psychology, 63*, 267-276.

Kanter R. M. (1968). Commitment and Social Organization: A Study of Commitment Mechanisms in Utopian Communities. *American Sociological Review, 33*(4), 499-517.

Kidron A. (1978). Work Values and Organizational Commitment. *Academy of Management Journal, 27*(2), 239-247.

King E. J. & Crowther R. M. (2004). The Measurement of Religiosity and Spirituality. Examples and Issues from Psychology. *Journal of Organizational Change Management, 17*(1), 83.

King E. J., & Williamson O. I. (2005). Workplace Religious Expression, Religiosity and Job Satisfaction: Clarifying a Relationship. *Journal of Management, Spirituality and Religion, 2*(2), 173-198.

King, R. C., & Sethi V. (1997). The Moderating Effect of Organizational Commitment on Burnout in Information Systems Professionals. *European Journal of Information Systems, 6*, 86-96.

Kutcher, J. E., Bragger, J. D., Srednicki, R. O., & Masco, L. L. (2010). The Role of Religiosity in Stress, Job Attitudes, and Organizational Citizenship Behavior. *Journal of Business Ethics, 95*, 319-337.

Lee, S. M. (1971). An Empirical Analysis of Organizational Identification. *Academy of Management Journal, 14*(2), 213-226.

Mathieu E. J., & Zajac M. D. (1990). A Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organizational Commitment. *Psychological Bulletin, 108*(2), 171-194.

Meglino B. M., Ravlin E. C., & Adkins C. L. (1989). A Work Values Approach to Corporate Culture: A Field Test of the Value Congruence Process and Its Relationship to Individual Outcomes. *Journal of Applied Psychology, 74*(3), 424-432.

Meyer J. P., Irving G. P., and Allen N. J. (1998). Examination of The Combined Effects of Work Values and Early Work Experiences on Organizational Commitment. *Journal of Organizational Behavior, 19*, 29-52.

Meyer J. P., Stanley D. J., Herscovitch L., & Topolnytsky L. (2002). Affective, Continuance, and Normative Commitment to the Organization: A Meta-Analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavior, 61*, 20-52.

Meyer, J. P., & Allen, N. J. (1991). A Three-Component Conceptualization of Organizational Commitment. *Human Resource Management Review, 1*(1), 61-89.

Mowday, R. T., Porter, L. W. and Steers, R. M. (1982). *Organizational Linkages*. Academic Press, New York.

Mowday, R. T., Steers, R. M., Porter, L. W. (1979). The Measurement of Organizational Commitment. *Journal of Vocational Behavior, 14*, 224-247.
Olowookere, E. I. (2014). Influence of Religiosity and Organizational Commitment on Organizational Citizenship Behaviors: A Critical Review of Literature. *Advances in Social Sciences Research Journal, 1*(3), 48-63.

Parboteeah, K. P., Hoegl M., & Cullen J. (2009). Religious Dimensions and Work Obligation: A Country Institutional Profile Model. *Human Relations, 62*(1), 119-148.

Pennings, J. M. (1970). Work Value Systems of White Collar Workers. *Administrative Science Quarterly, 15*, 397-405.

Porter, L. W., Steers R. M., Mowday R. T., & Boulian P. V. (1974). Organizational Commitment, Job Satisfaction, and Turnover Among Psychiatric Technicians. *Journal of Applied Psychology, 59*(5), 603-609.

Putti J. M., Aryee S., & Liang T. K. (1989). Work Values and Organizational Commitment: A Study in the Asian Context. *Human Relations, 42*, 275-288.

Roe R. A., & Ester P. (1999). Values and Work Empirical Findings and Theoretical Perspective. *Applied Psychology: An International Review, 48*(1), 1-21.

Rokeach, M. (1968a). A Theory of Organization and Change Within Value-Attitude Systems. *Journal of Social Issues, 24*(1), 1968.

Rokeach, M. (1968b). The Role of Values in Public Opinion Research. *Public Opinion Quarterly, 32*(4), 547.

Ros, M., Schwartz, S. H., & Surkiss S. (1999). Basic Individual Values, Work Values, and the Meaning of Work. *Applied Psychology: An International Review, 49*(1), 49-71.

Saige, A. (1993). Measurement of Religiosity and Work Obligations Among Israeli Youth. *The Journal of Social Psychology, 133*(4), 529-537.

Sav, A. (2016). The Role of Religion in Work-Life Interface. *The International Journal of Human Resource Management, 10*, 1-22.

Schwartz, S. H., & Huismans S. (1995). Value Priorities and Religiosity in Four Western Religions. *Social Psychology Quarterly, 58*(2), 88-107.

Sheldon, M. E. (1971). Investments and Involvements and Mechanisms Producing Commitment to the Organization. *Administrative Science Quarterly, 16*, 142-150.

Sikorska-Simmons, E. (2005). Predictors of Organizational Commitment Among Staff in Assisted Living. *The Gerontologist, 45*(2), 196-205.

Steers, R. M. (1977). Antecedents and Outcomes of Organizational Commitment. *Administrative Science Quarterly, 22*, No.1, 46-56.

Super, D. E. (1980). A Life-Span, Life-Space Approach to Career Development. *Journal of Occupational Psychology, 52*, 129-148.

Vecchio P. R. (1980). A Test of a Moderator of the Job Satisfaction-Job Quality Relationship: The Case of Religious Affiliation. *Journal of Applied Psychology, 65*(2), 195-201.

Wiener Y., & Gechman S. A. (1977). Commitment: A Behavioral Approach to Job Involvement. *Journal of Vocational Behavior, 10*, 47-52.

Zytowski D. G. (1970). The Concept of Work Values. *Vocational Guidance Quarterly, 18*(3) 176-186.
