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Workaholism: Its definition and nature*

by

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Workaholism: Its Definition and Nature

Abstract

The term 'workaholism' is widely used, but there is little consensus about its meaning,

beyond that of its core element: a substantial investment in work. Following Snir and Zohar

(2000), workaholism was defined in the present study as the individual's steady and

considerable allocation of time to work-related activities and thoughts, which does not derive

from external necessities. Subsequently, it was measured as time invested in work, while

controlling the financial needs for this investment. The relation between workaholism and

possible attitudinal (meaning of work indices), demographic (gender, marital status), and

situational (occupation type, employment sector) variables was examined through two

representative samples of the Israeli labor force. The following predictor variables were

significantly related to workaholism: work centrality, economic orientation, occupation type,

employment sector and gender. From those variables, gender was found to be the strongest

predictor. Namely, men, in comparison to women, have a higher likelihood of being

workaholics. Moreover, married women worked fewer hours per week than unmarried

women, while married men worked more hours per week than unmarried men. The theoretical

contribution of the above findings, and of the other study's findings, to the understanding of

workaholism is discussed.

Key Words: Workaholism, Meaning of work.

Workaholism: Its Definition and Nature

Introduction

Our understanding of work and its nature has attracted a great deal of attention recently, due to dynamic changes in working patterns, employment uncertainty, and transformations that have taken place in the meaning of work (Harpaz, 1999). During the 1970s and early 80s, there were some concerns that the value of work in Western society has been eroded and that a growing involvement with leisure activities and comfort has replaced the traditional work ethic (Cherrington, 1980; Harpaz, 1988; Vecchio, 1980). In fact there are many indications that the work ethic remains strong and for some people it is even growing (Abbas, Falcone, & Azim, 1995; Lipset, 1992; Tennesen, 1994). In certain situations, individuals may overcommit their energies and their time to their working lives. This over-commitment to work has been used in the literature to describe the notion of "workaholism" (Seybold, & Salomone, 1994).

The objective of this paper is to gain a better understanding and knowledge regarding the phenomenon of workaholism.

The term "workaholic", coined by Oates (1971), refers to people whose need to work has become so exaggerated that it may constitutes a danger to their health, personal happiness, interpersonal relations and social functioning (Oates, 1971). Although considerable attention has been devoted to the concept of workaholism in recent years (Fassel, 1990; Garfield, 1987; Kiechel, 1989a, 1989b; Killinger, 1991; Klaft & Kleiner, 1988; Koonce, 1998; Machlowitz, 1980; Waddell, 1993), little empirical research has been undertaken to further our understanding of this phenomenon (e.g., Burke, 1999a; 1999b; 1999c; Doerfler & Kammer, 1986; Porter, 2001; Robinson & Post, 1995, 1997; Snir & Zohar, 2000; Spence & Robbins, 1992). Most writings have been anecdotal and clinical (e.g., Fassel, 1990; Killinger, 1991;

Oates, 1971; Schaef & Fassel, 1988). Basic questions of definition have not been addressed and measurement concerns have been neglected (Scott, Moore, & Miceli, 1997).

Although the term workaholism is widely used, there is very little consensus about its meaning, beyond that of its core element - a substantial investment in work. Mosier (1983) defined workaholics simply as those who work at least 50 hours a week. Some writers view workaholism in positive terms (Cantarow, 1979; Machlowitz, 1980; Sprankle & Ebel, 1987). For example, Machlowitz (1980) conducted a qualitative interview and study of more than 100 workaholics and found them to be satisfied with their lives. She prefers to view workaholism as an approach or an attitude toward working, rather than as the amount of time spent at work, since workaholics continue to think about work even when they are not working. Cantarow (1979: 56) speculated that the "joy of creativity" is an element of the workaholic personality. She also stressed that workaholics seek "passionate involvement and gratification" through work (Cantarow, 1979: 58). Others view workaholism negatively (Cherrington, 1980; Killinger, 1991; Oates, 1971; Porter, 1996; Robinson, 1989, 1997; Schaef & Fassel, 1988). For example, Cherrington (1980) sees workaholism as an irrational commitment to excessive work. These writers equate workaholism with other addictions and have focused on its deleterious aspects. Those who view workaholism favorably usually encourage it; while those who oppose it tend to discourage it.

Some researchers have proposed the existence of different types of workaholic behavior patterns, each having potentially different antecedents and associations with job performance, work and life outcomes (Naughton, 1987; Scott, Moore, & Miceli, 1997; Spence & Robbins, 1992). Naughton (1987) presents a typology of workaholism based on the dimensions of career commitment and on obsessive-compulsive tendencies. Job-involved workaholics (high work commitment, low obsession-compulsion) are hypothesized to perform well in demanding jobs and be highly job satisfied, with low interest in non-work activities.

Compulsive workaholics (high work commitment, high obsession-compulsion) are hypothesized to be potentially poor performers (staff problems resulting from impatience and ritualized work habits).

Spence and Robbins (1992) define workaholism based on their notion of a "workaholic triad". The workaholic triad consists of three properties: work involvement, a feeling of being driven to work, and work enjoyment. Workaholics score high on work involvement and on feelings of being driven to work, and low on work enjoyment. In contrast, work enthusiasts score high on work involvement and work enjoyment, and low on the compulsion to work. Enthusiastic workaholics score high on all three components. In their research, workaholics were found to score higher than work enthusiasts on measures of perfectionism, non-delegation of responsibility, and job stress. They also scored higher on a measure of health complaints.

Scott, Moore, and Miceli (1997) identify three types of workaholism patterns: compulsive-dependent, perfectionist, and achievement-oriented. They suggest that compulsive-dependent workaholism is positively related to levels of anxiety, stress, and physical and psychological problems, and negatively related to job performance, job and life satisfaction. Perfectionist workaholism (when there are inadequate opportunities for the workaholic to gain control) is supposed to be positively related to levels of stress, physical and psychological problems, hostile interpersonal relationships, as well as voluntary turnover and absenteeism. It is also supposed to be negatively related to job satisfaction and performance (when the job requires overview and perspective). Finally, achievement-oriented workaholism is positively related to job and life satisfaction (when there are organizational rewards for achievement and personal demands are low), physical and psychological health, job performance, and pro-social behavior. It is also supposed to be negatively related to stress and voluntary turnover (when there are organizational rewards for achievement).

In summary, the three main alternative views concerning workaholism (the positive view, the negative view, and proposing the existence of different types of workaholism) are presented in Table 1.

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Insert Table 1 about here

Snir and Zohar (2000) define workaholism as the individual's steady and considerable allocation of time to work-related activities and thoughts, which does not derive from external necessities. This definition, compared to others in the literature, has several advantages. First of all, it includes the prominent core element of workaholism: a substantial behavioral and cognitive investment in work, without determining a priori whether workaholism produces positive, negative, or mixed consequences for workaholics, their families and their work environment. Secondly, this substantial behavioral and cognitive investment in work has to be steady. Namely, it should not result from a temporary workload. Additionally, this definition also considers external necessities that might foster workaholism. According to Schneider's Attraction-Selection-Attrition theory (Schneider, 1987; Schneider, Goldstein, & Smith, 1995), different kinds of organizations attract, select, and retain different kinds of people. Porter (1996) claims that there are certain organizational cultures in which long hours and "sacrifices" are widely believed to be required for success and advancement. Over time, the process of selfselection, employer recruitment-selection, socialization and reward systems would seem to build toward a situation in which workaholics can play out their tendencies more easily in some organizations than in others. Thus, based on the rationale of Schneider (1987) and Porter (1996), Snir (1998) claims that both situational and personality factors are important for the understanding of workaholism. However, while working overtime in order to pay debts or working long hours so as to advance one's career (e.g., a medical residency) can be considered as external necessities, organizational norms or job requirements need not be, since, at least in the long term, alternative less demanding workplaces/jobs might be available. As Scott, Moore, and Miceli (1997: 295) point out, "individuals who continue to work many hours and think about work excessively are appropriately viewed as workaholics when other organizations that might hire them would not require such devotion".

The fourth advantage of Snir and Zohar's (2000) definition is that it is not based on work attitudes or values. As noted above, the prominent core element of workaholism refers to a pattern of substantial behavioral and cognitive investment in work; and not to an attitude or a belief about work. Furthermore, it has been suggested that a conceptual definition should be broad, yet clearly bounded and not redundant with other concepts (Osigweh, 1989). In this respect, a major flaw of an attitude-based definition of workaholism is that it might be indistinguishable from other well-established concepts, such as work centrality or job involvement and satisfaction. For example, defining workaholism based, inter alia, on work enjoyment (Spence & Robbins, 1992), and examining its relations to positive work outcomes, such as job satisfaction, might be problematic. One should also note that there is no consensus concerning the differences between concepts such as work ethic, work values, work commitment, work involvement, and work centrality (Morrow, 1983).

There has been scant empirical research on workaholism. The present study builds on previous work as well as extending this work to new areas. Given the advantages of the definition of workaholism proposed by Snir and Zohar (2000), this definition will be used throughout this paper. The goal of this study is to enhance our knowledge regarding workaholism by examining its relations with possible major attitudinal (meaning of work indices), demographic (gender, marital status), and situational (occupation type, employment sector) variables.

Conceptualization of the Meaning of Work

Despite the relatively recent interest in this topic, a well-articulated theory of the meaning of work (MOW) has not yet been developed. The pioneering classic project of the Meaning of Work International Research Team resulted only in a heuristic model, based on the conception that the meaning of work is determined by the choices and experiences of individuals and by the organizational and environmental context in which they work and live (MOW - International Research Team, 1987). The conceptualization presented here is based on the MOW research project, carried out comparatively in eight countries (Belgium, Britain, Japan, Netherlands, USA, West Germany, former Yugoslavia and Israel). It portrays the meaning of work in terms of six major notions or indices. Four of them are relevant for the present study: work centrality, expressive orientation, economic orientation, and interpersonal relations. Descriptions of the core concept addressed by each are specified below.

Work centrality as a life role

Work is one of the most basic and important activities for people in modern society. The assertion that work plays a central and fundamental role in the life of individuals has been supported empirically in most industrialized countries (Brief & Nord, 1990; England & Misumi, 1986; Mannheim, 1993). Studies by Dubin and others (Dubin, Champoux, & Porter, 1975; Dubin, Hedley, & Taveggia, 1976) were helpful in developing this concept, which refers to the degree of general importance that working has in one's life at any given time (MOW - International Research Team, 1987). In general, work has been found to be of relatively high importance as compared with other areas of life (England, 1991; Ruiz-Quintanilla & Wilpert, 1991). It is usually considered to be of more importance than leisure, community, and religion and was found in several studies to be ranked second only to family (Harding & Hikspoors, 1995; Harpaz, 1999; MOW - International Research Team, 1987).

Work centrality has been found to be positively related to important organizational variables, such as job satisfaction, participation in decision making (Kanungo, 1982), and job tenure (Dubin et al., 1975). Individuals with high work centrality seem to be more committed to their organizations and derive a purpose and contentment from their jobs. Hence, it is conceivable that a sudden possession of a large sum of money or wealth would not prompt individuals to relinquish their jobs.

Expressive orientation

This concept emphasizes individuals' needs, including their evaluation of their competence for the job and whether the work task allows them an appropriate level of self-determination (Deci & Ryan, 1985). It is generally agreed that expressive or intrinsic variables include work aspects such as an interesting job, variety, autonomy, challenging work, etc. Such expressive work aspects were found to be important for the development of a strong job involvement among employees (Kanungo, 1982; Vroom, 1962). Several scholars define or equate job involvement or components of it with work centrality or with the view of work as a central life interest (Lodahl & Keiner, 1965; Pinder, 1998). Expressive orientation emerged as the strongest predictor of work centrality in Germany, Israel, Japan, and the United States, prompting the researchers to argue that expressive orientation seems to be a universal phenomenon (Harpaz & Fu, 1997).

Economic orientation

This sphere steams from one's disposition towards instrumental work outcomes. It assumes that people work mainly for, are motivated by, and enjoy obtaining the instrumental aspects of their work context. The importance of instrumental rewards tends to vary according to their attractiveness to individuals and their ability to satisfy various needs (Lawler, 1994). In Israel, income was selected as the most important work outcome by more than 30 percent of

the sample representing the labor force in the 1980's, and by 43 percent in the 1990's (Harpaz, 1999).

There are a number of contentions and findings claiming that in contradiction to general belief, intrinsic or expressive needs are not the only important aspect of work for people, and that instrumental variables are important as well (Dubin, Champoux, & Porter, 1975; Kanungo & Mendonca, 1992). It was disclosed that the most important role of work with which people identify is that of providing income for sustaining life and fulfilling other important needs (England and Harpaz, 1990; MOW - International Research Team, 1987). Accordingly, it seems that people with a high inclination toward instrumental or economic values perceive work as a main vehicle for providing income.

Interpersonal relations

Humans are social beings and interaction between them is essential for their mental health (McAdams, 1988). The importance of interpersonal relations between people, for their well being and subsistence, has been extensively discussed by various scholars (Battle, 1990). The need for affiliation and, specifically, the desire for friendly and close interpersonal relationships are part of most need theories (e.g. McClelland, 1985). In their classic typology of the meanings and functions of work that seems to incorporate the findings of most of the research, Kaplan and Tausky (1974) emphasize the prominence of 'satisfying interpersonal experiences' and point out that satisfaction stems from affiliations established at work (Kaplan & Tausky, 1974). The influence of social relations at work was also demonstrated by the results attained by the MOW project's outcomes (England, 1991; MOW - International Research Team, 1987).

Finally, some additional variables were examined in the MOW study in order to provide information on demographic variables, as well as a number of other aspects of the work situation (MOW - International Research Team, 1987). Six of these variables are relevant for

the present research topic: gender, marital status, occupation type, employment sector; and, as called for by the workaholism definition that we use, weekly work hours and the degree of

Hypotheses

Based on the limited available literature regarding the relations between workaholism and possible attitudinal, demographic, and situational variables, several hypotheses are being tested in the present study.

Attitudinal variables: Meaning of work indices

Work centrality

financial needs

The roots of workaholism lie in the old Calvinistic philosophy that work redeems the believer and that indulging in pleasure will bring eternal damnation. Even nowadays, the dictum that work is a virtue and play is a sin still pervades in several industrial societies. The work ethic encourages working hard and putting in long hours. The appreciation of this behavior is reflected in sayings, such as that someone is "devoted" to one's work (Killinger, 1991). Attributing high value to work is also a characteristic of Judaism. At different periods of time, work seems to have been a central focus of attention for Jews/Israelis, a norm that has had an effect on other important life values and attitudes and has shaped generations of workers in Israel (Harpaz, 1990).

Machlowitz (1980) claims that work is integral to and generally indistinguishable from the rest of the lives of workaholics. Scott, Moore, and Miceli (1997) claim that workaholics spend a great deal of time in work activities, which consequently results in their giving up important social, family, or recreational activities. It may be argued that these are the behavioral manifestations of the considerable importance, both in an absolute and relative sense, attributed to work by workaholics. Hence, we assume:

Hypothesis 1. Work centrality will be positively related to workaholism.

Expressive orientation

Machlowitz (1980) uses the term workaholic to describe individuals whose desire to work long and hard is expressive. In addition, their work habits almost always exceed their job requirements and the expectations of the people with whom or for whom they work. Workaholism stems not from the motivation to earn more money, but rather to earn what Machlowitz (1980: 119) refers to as "psychic income," defined as "responsibility, meaning, opportunity, and recognition". Therefore:

Hypothesis 2. Expressive work orientation will be positively related to workaholism.

Economic orientation

On the one hand, there are indications in the literature concerning the importance of economic reasons for working. Money plays an important role in the life of most people (Lawler, 1971), and economic reasons for working are as important as ever (Haywood, et al., 1989). However, on the other hand, Scott, Moore, and Miceli (1997) state explicitly that workaholics work beyond what is reasonably expected to meet basic economic needs. Machlowitz (1980) claims that motivation for workaholism is not mainly economic or instrumental, but rather intrinsic. Accordingly, we expect:

Hypothesis 3. There will be no relation between economic orientation and workaholism.

Interpersonal relations

Klaft and Kleiner (1988) indicate that the standards set by workaholic managers can result in resentment, conflict, and low office morale. Machlowitz (1980) states that workaholics demand devotion and dedication to the job even when their subordinates "are at home asleep". They also tend to be critical and contemptuous of co-workers, and display little interest in and great intolerance for the personal lives of assistants and associates. However, if, as Porter (1996) claims, workaholics are indeed attracted to and preferred by organizations in which long

hours and "sacrifices" are highly appreciated, they are likely to find themselves working with people who demonstrate the same workaholic norms and behaviors and consequently have good interpersonal relations with those people. In view of these two opposing trends, namely, workaholics having problematic interpersonal relations with non-workaholics and good interpersonal relations with other workaholics, we assume:

Hypothesis 4. There will be no relation between valuing interpersonal relations at work and workaholism.

Demographic variables: Gender and marital status

There is a consensus among researchers that Israeli society is family-centered (e.g., Harpaz, 1990; Izraeli, 1990). Although both Israeli men and women attribute great importance to family life, women shoulder most family responsibilities (Izraeli, 1990). For most men, the dual-income situation differs fundamentally from that experienced by their spouses because, by tradition, the "second shift" of unpaid work at home (i.e., home chores) does not fall on men (Hochschild, 1989). Wives in dual-career families spend much more time on household tasks than their husbands (Rothman, 1998). A number of studies have reported that working mothers have more difficulties than fathers do in balancing work and family demands (Duxbury & Higgins, 1994; Higgins, Duxbury & Lee, 1993). As a reaction to domestic demands, married women sometimes have to choose jobs that are part-time, have flexibletime, or are close to home (Izraeli, 1990). While married women have to adjust to work demands in order to meet domestic demands, according to the good-provider model (Bernard, 1981), to the extent that men view their family role as being the provider, marriage should lead them to increased work effort. Findings from past research generally have been consistent with the good-provider model (e.g., Cooney & Uhlenberg, 1991; Nock, 1998). Thus, as long as work is defined in the sense of paid employment, we assume:

Hypothesis 5a. Men, in comparison to women, will have a greater likelihood of being workaholics.

Hypothesis 5b. Married women will work fewer hours per week than unmarried women, while married men will work more hours per week than unmarried men.

Situational variables

Occupation type

Individuals with strong career identities work long hours, recommend work to others, stay with and invest in the organization, and sacrifice non-work activities and responsibilities for work. One component of career identity, the desire for upward mobility, encompasses needs for advancement, recognition, dominance and leadership (London, 1983).

Being a professional seems to provide suitable conditions for developing a strong career identity and, as a result, working long hours. Managerial positions, by definition, demand increased work effort and responsibility. These positions also have the potential of fulfilling the desire for upward mobility. Based on the above claims, it is reasonable to assume that workaholics are more attracted to professional and managerial positions, than non-professional and non-managerial positions. Consequently:

Hypothesis 6. Professionals and managers, in comparison to other workers, will have a greater likelihood of being workaholics.

Employment sector

Schneider's (1987) claim, that different kinds of organizations attract, select, and retain different kinds of people, may be applied regarding to an entire employment sector, not just a specific organization. For example, Izraeli (1990) argues that those with a high need to control time spent at work, such as working mothers, are attracted to the public sector due to the stable and convenient work hours it can offer, as compared to the private sector. Indeed, women

constitute about 60 percent of the Israeli civil service employees (Efroni, 1988; Maor, 1999). Workaholics, on the other hand, may be better suited to entrepreneurial ventures, in which they can manifest their devotion to work more easily, than standard employment situations (Machlowitz, 1980). Thus, we expect:

Hypothesis 7. Private sector employees, as compared to public sector employees, will have a greater likelihood of being workaholics.

Method

Samples

Data were collected in 1981 through the Meaning of Work international project and then again in 1993.

The 1981 sample

In 1981, a questionnaire probing the Meaning of Work was completed by a representative sample of the Israeli labor force, consisting of 973 respondents. The sample was drawn from 10 socioeconomic strata as defined by the Central Bureau of Statistics, using an ecological method. Eight strata represented the urban areas, covering 95 percent of the Israel's citizens; while the remaining two strata represented the rural settlements, according to Israel's population distribution. This resulted in stepwise random selection according to random household identification, random choice among those who fell within prescribed categories, and random quota sampling according to the specifications of the Israeli Central Bureau of Statistics.

Specifically, 35 percent of the sample was drawn from the four largest cities in Israel (Tel Aviv, Jerusalem, Haifa, and Beer Sheba), 35 percent from 'old' cities (founded before the establishment of the state of Israel in 1948), 13 percent from 'new' cities (founded after 1948), 6 percent from old urban settlements (towns administered by a local municipality), 7

percent from new urban settlements, 1.5 percent from old rural settlements, and 2.5 percent from new rural settlements. The stratification of the sample ensured a high level of representation and decreased sampling error.

Each city was divided into sub-districts and, within each district, streets were randomly selected according to their representation; and only in the range of the sampling error, so its population was organized in a less heterogeneous stratum. The sampling unit was the family living in an apartment or a house. In each street interviewers went to the first house, then from house to house, entering every apartment until they completed the number of interviews allocated to that street. Thus, a systematic bias of the sample was prevented (i.e., it eliminated the tendency of interviewers to enter only the lower floors, as most Israelis tend to live in apartment houses). Individuals were interviewed in their homes by professional interviewers from a national survey agency, according to the University of Michigan's 'Kish Method' (Kish, 1967). Namely, the interviewer was asked to compile a list of all people, aged 18 and above, who permanently live in the same household. After the first interviewee was chosen, the interviewer proceeded to interview every third person on the list. This system ensures that two principles are taken into consideration: first, a proper representation of families with respect to their size, which eliminates over-representation of small families or underrepresentation of large families. The second principle - a lack of bias according to the availability of family members to the interview. Women, housewives, mothers of young children, and people over 65 tend to spend more time at home. Drawing up lists of family members and interviewing every third person prevented systematic bias of this kind.

Finally, an average interview lasted about 25 minutes, and about 87 percent of all individuals approached for interviewing agreed to participate. Comparisons with regard to census data showed a high degree of representation (MOW – International Research Team, 1987).

The sample population comprised 57.4 percent men and 42.6 percent women, with a mean age of 39.4 years. 81.6 percent of the respondents were married. Regarding educational level, 19.1 percent had only primary school education, 46.1 percent had a secondary school education, 18.5 percent had some college or vocational/technical education, and 16.3 percent had a university degree.

The 1993 sample

Data on a new representative sample of the labor force were collected in 1993. The 1993 study followed similar sampling and interviewing procedures to those used in the 1981 study. Specifically, respondents were selected by various random methods and were interviewed individually in their homes by professional interviewers from a national survey agency. The questionnaire contained the same items used in the 1981 sample, an average interview again lasted about 25 minutes, and 84 percent of all individuals asked to be interviewed agreed to participate in the study. Likewise, comparisons with census data of the *Statistical Abstracts of Israel* (1995) showed a high degree of representation.

The 1993 sample population consisted of 942 respondents, 57.9 percent of whom were men and 42.1 percent women; the mean age was 38.2 years. 74.5 percent of the respondents were married. Regarding education, 6.9 percent had primary education, 50.3 percent had secondary education, 21.9 percent had some college or vocational/technical education, and 20.9 percent had a university degree.

Measures

Workaholism

Workaholism was measured as total weekly work hours (including overtime), while controlling the financial needs (see the following paragraph) for this time-investment by means of hierarchical regression. This time-investment measure addresses only the behavioral (work-related activities) and not the cognitive (work-related thoughts) component of the

workaholism definition proposed by Snir & Zohar (2000). However, the above measure was found to have high predictive validity regarding the cognitive component of Snir and Zohar's definition. Snir (1998) conducted a study according to the Experience-Sampling Method, which attempts to sample randomly from people's everyday experiences, on a convenience sample of 65 full-time workers. Each of the 65 respondents provided four randomly sampled self-reports per day of his/her activities, thoughts and feelings over a one-week period. It was found that workaholism, as a predictor variable, was positively correlated with thinking about work in general and also in non-work settings during that one-week period.

Financial needs

Financial needs were measured by an index that took into account marital status, whether or not the respondent's spouse worked (at least in a part-time job), and the number of people that were financially dependent on the respondent. This is an index similar to that used by George and Brief (1990). Conceptually, single respondents and married respondents whose spouses worked were considered to have fewer financial needs than those of married respondents with non-working spouses. Additionally, the more people that respondents supported financially, the greater were considered their financial needs. Based on this reasoning, scores on the financial need index were computed in the following manner:

(1) respondents who were single or married with a working spouse were assigned an initial score of 0, and respondents who were married with a non-working spouse were assigned an initial score of 1; (2) the final financial needs score for the respondent was calculated by adding to this initial score the number of people who were supported financially by the respondent.

Meaning of work

Below is a description of four meaning of work domains and their measurement scales, followed by a description of the procedure for the extraction and development of the indices used in the present study. These four domains were employed in the 1981 Israeli data collection, as a part of the international MOW study (MOW -International Research Team, 1987). In order to maintain uniformity for replication and comparability, they were also used in the 1993 data collection.

The Meaning of Work is an original and pioneering cross-national project initiated in the late 1970s, by a group of researchers from eight countries. A model consisting of five domains was jointly formulated and empirically tested in each country (MOW-International Research Team, 1987). Four domains are relevant for the present study: work centrality, valued work outcomes, work goals, and work-role identification. Each of these domains is designed uniquely, in order to capture the multidimensionality and richness embodied in attitudes towards work and work values. These domains were utilized for the extraction of the present study's four MOW indices. A short description of the domains follows.

Work centrality as a life role

Two measures of work centrality were used. The first was an absolute measure (Likert-type scale) that indicates the overall importance of work in the individual's life (from 1, low to 7, high). The second was a relative measure that had respondents assign up to a total of 100 points to the following areas of their lives: leisure, community, work, religion, and family.

Valued work outcomes

This concept examines general outcomes sought through working, as well as their relative importance. It assumes that individuals making the evaluation of importance sufficiently know or have experienced each outcome to be able to link them to each other in an ordered manner. Respondents were asked to assign up to a total of 100 points to the following six

outcomes that work provides: status and prestige, income, time absorption, interesting contacts, service to society, and satisfaction.

Importance of work goals

Another way of understanding what is important to individuals in their working life is to focus on a uniform detailed set of specific work goals or facets of working and to ascertain how important each is to individuals in a relative sense. Respondents ranked 11 goals or aspects of their work life according to their importance: opportunity to learn, interpersonal relations, possibilities for promotion, working hours, variety, interesting work, job security, match between job and abilities, pay, working conditions, and autonomy.

Work-role identification

This covers the extent to which people define and identify working in terms of various roles. Respondents ranked six work roles in order of their importance: task, company, product/service, co-workers, occupation, and money.

As indicated above, responses to the 1981 and 1993 MOW surveys were collected using a variety of methods. These included: a) scoring items on a one to seven Likert scale, b) an allocation of a 100 points among several items according to their importance, and c) ranking items according to a given priority. A utilization of different measurement approaches is a unique characteristic of the MOW study; however, comparing relationships among all items becomes problematic. This is mainly apparent in our ability to create indices and examine their reliability in the standard psychometric procedures. Consequently, in order to surmount this complication, an alternative procedure, the Multi Dimensional Scaling (MDS), was employed.

For the reader unfamiliar with this process, MDS is a scaling method that attempts to configure a geometrical space of a set of relationships among variables underlying different attributes or domains. It may be utilized when it is not known which dimensions individuals

are using in responding to a group of stimuli. Hence, it enables the researcher to determine the composition of those dimensions (Nunnally, 1978). In multidimensional scaling, the complex phenomenon under study is usually represented by geometrical space, and the number of dimensions used for representing relationships among stimuli is usually unknown. Points in that space characterize individual stimuli, and it requires responses in terms of similarities or differences among stimuli. The more similar the stimuli, the closer are the points (Nunnally, 1978). The objective of multidimensional scaling is to first determine the number of dimensions, and then to obtain scale values for the stimuli on a selected set of dimensions (Ghiselli, Campbell, & Zedeck, 1981).

In order to rank relationships among the miscellaneously scaled items in the present study, an ordinal distance matrix was formed by the absolute difference between normalized items scores, corrected for central tendencies and interdependencies. A transformation of the ordinal relationships among the MOW items, to an interval scale, was carried out through a Multi Dimensional Scaling method (Klahr, 1969), prepared by *SAS* MDS procedure (1992). The procedure used Kruskal and Wish's (1978) stress formula with weighted Euclidean distances in which each matrix is allowed differential weights for the dimensions (in accordance with the "Indscal" model formulated by Carroll & Chang, 1970). The 1981 and 1993 samples were analyzed discretely. The input for the analysis consisted of the ordinal relationship matrix calculated for each respondent, and an initial matrix taken from the MDS configuration of the two samples combined. For each sample, the MDS output was a five-dimensional configuration of items similarities on an interval scale (with 19.18 and 19.14 percent stress for the 1981 and 1993 samples respectively).

The eleven items composing the indices for the present study are as follows:

1. Work centrality: (a) absolute significance of work in an individual's life; (b) relative importance of work in relation to other life areas.

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2. Expressive orientation: (a) variety of work; (b) interesting work that you really like; (c)

satisfying work.

3. Economic orientation: (a) importance of pay; (b) the significance of the role of money; (c)

valued income.

4. Interpersonal relations: (a) working permits interesting contacts; (b) type of people one

works with; (c) good interpersonal relations.

The structure and stability of these indices across the measurement periods of 1981 and

1993 can be examined by the following results. Intra-item correlation (intra-class correlation

for between-samples similarity) for the items ranged from 0.976 to 0.995, indicating that

patterns of items' configuration are similar in both 1981 and 1993 samples. A Stepwise

Discriminant Analysis revealed a significant contribution of four out of five MDS dimensions

to the discrimination of items among the four MOW indices (significance ranging from

p<0.0001 to p<0.0441). Significance of Mahalanobis distance ranged from 0.0582 to 0.0001.

Two canonical variables had a significant contribution to the discrimination of items between

indices (0.0001 and 0.0004) with zero error rates. Figure 1 portrays the canonical scores of

the eleven items from the 1981 and 1993 surveys.

Insert Figure 1 about here

The above procedure clearly illustrates that the items forming each MOW indices remained

in a similar configuration across samples. Hence, the results indicate a distinguished stability

in the structure of these indices between both measurement periods (1981 and 1993). The

analysis disclosed that the measurement model is solid and that these variables consistently

represent the meaning of work indices. Consequently, these indices serve as four of the

independent variables in the present study.

Our additional independent variables were measured as follows:

Gender

Gender was a single item, which requested that respondents indicate their sex (0 male; 1 female).

Occupation type

Respondents were classified according to three major occupational categories: professional and management (13.8 and 31.4 percent for the 1981 and 1993 samples respectively), clerical and services (49.7 and 46.5 percent for the 1981 and 1993 samples respectively), production and agriculture (18.4 and 13.6 percent for the 1981 and 1993 samples respectively).

Other individuals, such as unemployed, military personnel, and those without a specified occupation, were not included in the relevant inferential analysis (hierarchical regression). The latter was conducted only concerning the three major categories (1 professional and management; 0 a combination of the second and the third categories).

Employment sector

Individuals were classified according to the sector in which they are employed (0 public, 1 private). 41.4 percent of the 1981 respondents and 34.0 percent of the 1993 respondents were classified as public sector employees. 36.7 percent of the 1981 respondents and 52.4 percent of the 1993 respondents were classified as private sector employees. The unemployed and, due to change of ownership during the eighties in some of firms initially owned by the Histadrut (Israeli General Federation of Labor), the Histadrut sector employees were not included in the relevant inferential analysis (hierarchical regression).

Analysis

Hypotheses regarding work centrality, expressive orientation, economic orientation, interpersonal relations, gender, occupation type and employment sector will be examined via hierarchical regression. In the hierarchical approach to multiple regression, the investigator specifies from the outset the order or hierarchy in which the predictor variables are to be introduced into the regression equation (Hays, 1994). We used this approach in order to find out the additional specific contribution of each of the above research variables to the prediction of total weekly work hours (including overtime) beyond the contributions of the following control variables: financial needs and labor force sampling year (1981 was coded as 0 and 1993 as 1).

The hypothesis concerning the interaction of gender by marital status was examined via multivariate analysis of variance (MANOVA) with financial needs as a covariate. The dependent variable was total weekly work hours. A three-way interaction of gender by marital status by labor force sampling year was also examined via MANOVA, in order to clarify the influence of the labor force sampling year on the pattern of the results.

Results

Means, standard deviations, and number of items among research variables are presented in Table 2.

Insert Table 2 about here

Hypotheses 1 to 5a, 6 and 7 were examined via hierarchical regression. The financial need score, which was entered into the regression equation in the first step, accounted for 0.6% of the variance in total weekly work hours (F (1,1176) 7.07, p<0.01, adjusted R^2 0.005). Labor force sampling year, which was entered into the regression equation in the second step,

accounted for additional 2.9% of the variance in total weekly work hours (F for ΔR^2 (1,1175) 35.44, p<0.001, adjusted R^2 0.033). The seven variables (work centrality, expressive orientation, economic orientation, interpersonal relations, gender, occupation type and employment sector) that were entered into the regression equation in the third step, accounted for additional 23.8% of the variance in total weekly work hours (F for ΔR^2 (7,1168) 54.77, p<0.001, adjusted R^2 0.268). Standardized coefficients for the above variables are presented in Table 3.

Insert Table 3 about here

Hypothesis 1 was supported: work centrality was positively correlated with total weekly work hours. Hypothesis 2 was rejected: contrary to our prediction, no significant relation was found between expressive orientation and total weekly work hours. Hypothesis 3 was rejected: economic orientation, contrary to our prediction, was positively correlated to total weekly work hours. Hypothesis 4 was supported: no significant relation was found between valuing interpersonal relations at work and total weekly work hours. Hypothesis 5a was supported: men, in comparison to women, had a greater likelihood to work long hours. Hypothesis 6 was supported: professionals and managers, as compared to non-professional and non-managerial workers (in clerical, services, production and agriculture occupations), had a greater likelihood to work long hours. Finally, hypothesis 7 was also supported: private sector employees, as compared to public sector employees, had a greater likelihood to work long hours. Of the above seven variables, gender was found to be the strongest predictor of total weekly work hours.

Hypothesis 5b was examined via MANOVA. The analysis involved three independent variables (gender, marital status, and the year of labor force sampling), one covariate

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(financial need), and one dependent variable (total weekly work hours). Adjusted means and

standard deviations of total weekly work hours in the MANOVA are presented in Table 4.

Insert Table 4 about here

Hypothesis 5b was supported, as shown in Table 4. A significant main effect for gender was

revealed (F (1,1714) 216.44, p<0.001). Men, as compared to women worked more hours per

week. A significant two-way interaction of gender by marital status was also found (F

(1,1714) 15.49, p<0.001). Married women worked fewer hours per week than unmarried

women, while married men worked more hours per week than unmarried men. However, no

significant effect for the three-way interaction of gender by marital status by labor force

sampling year was found.

In both the hierarchical regression and the MANOVA described above, the pattern of results

remained stable across the labor force samples.

Discussion

The present study is among the relatively few empirical studies concerning workaholism

(e.g., Porter, 2001; Snir & Zohar, 2000; Spence & Robbins, 1992). Moreover, the study's

findings have high external validity with regard to people in the Israeli labor force, since it

was carried out on two representative samples of that population. In view of the propositions

that workaholism may be on the rise (Fassel, 1990; Koonce, 1998) the findings of the present

study are timely. However, the question whether these findings can also be generalized to

other countries still has to be examined as well. In the 1981 Meaning of Work project

conducted in eight countries, including Israel, it was found that there is a 75-95% similarity

across the countries in the structure of individual work meanings (MOW- International

Research Team, 1987). In addition, non financial employment commitment was also high: over two-thirds of the respondents in each country state that they would continue to work even if they had enough money to live comfortably for the rest of their lives without working (MOW- International Research Team, 1987). In sum, although there are similarities in work-related attitudes across countries, a future systematic cross-national comparative study has to be carried out, in order to find out how universal workaholism, as characterized in this study, may be.

Workaholism was positively related to work centrality and economic orientation. It was also found to be primarily a male phenomenon, which is especially relevant concerning professional/managerial positions and the private sector. Working long hours could be the behavioral outcome of attributing high centrality to work. However, an alternative explanation for this positive relation between work centrality and workaholism may include a cognitively constructed rationale. In view of Bem's (1972) self-perception theory, some workers may conclude, based on their workaholic behavior, that work is central for them.

Contrary to our predictions, no significant relation was found between expressive orientation and workaholism, while economic orientation was positively related to workaholism. These findings contradict Machlowitz's (1980) claim that the motivation for workaholism is not mainly economic or instrumental, but rather intrinsic. However, as Dyer and Parker (1975) argue, it may be quite hard to distinguish between intrinsic and extrinsic work motivators. In the modern industrialized world, money is inculcated with moral and emotional meanings (Furnham & Argyle, 1998), and highly valued due to its ability to acquire power, esteem, autonomy and freedom, as well as goods (Tang, 1992).

In general, no significant relation was found between valuing interpersonal relations at work and workaholism. However, examining the value attributed by workaholics to interpersonal relations at work with other, similar, workaholic colleagues versus non-workaholics

colleagues, might have yielded different results. If indeed workaholics have a better interaction with people who demonstrate the same workaholic norms and behaviors than with non-workaholics, this may have some staffing implications. If possible, organizations should consider formation of homogeneous work-teams composed either by workaholics or non-workaholics. It could be a scheme to avoid stress that, as Porter (2001) claims, might be experienced by coworkers who cannot meet the demanding work-standards set by perfectionist workaholics.

The finding that men, in comparison to women, have a higher likelihood of being workaholics supports Pittman and Orthner's (1988) assertion that men apt to prefer work over relationships, more than women do. Since women's interest in professional advancement does not replace their orientation toward relationships (Baber & Monaghan, 1988), the working mother's 'second shift' at home (Duxbury & Higgins, 1994) may constitute a barrier for potential development of workaholic behavior in paid employment. Indeed, we found that married women worked fewer hours per week than unmarried women; while married men, as consistent with the good-provider model (Bernard, 1981), worked more hours per week than unmarried men. In a recent study (Kaufman & Uhlenberg, 2000), which was carried out only regarding married men and women, a somewhat similar pattern was discovered. Mothers work, on average, about 4.6 hours per week less than childless married women; while fathers work, on average, about one hour per week more than childless married men (Kaufman & Uhlenberg, 2000). Contrary to the present study's findings, no relation was found between gender and workaholism in two other studies (Burke, 1999a; Doerfler & Kammer, 1986). Doerfler and Kammer (1986) reported that 23 percent of their respondents were workaholics, consistent across the two sexes. However, the majority of single workaholics were female, and female workaholics reported more masculine and androgynous characteristics than feminine characteristics (Doerfler & Kammer, 1986). Burke (1999a) found that females and males were similar on the three workaholism components, based on Spence and Robbins's (1992) definition: work involvement, feeling driven to work, and work enjoyment. A conceptual difference may explain the contradiction between the present study and Burke's (1999a) findings, concerning the relation between gender and workaholism. While in the present study the conceptualization of workaholism is based on behavioral and cognitive work aspects (i.e. time investment in work-related activities and thoughts), Burke (1999a) relies on an attitude-based definition of workaholism. An attitude-based criterion, unlike a behavior-based one, does not take into consideration working women's 'second shift' at home. Thus, there is a higher likelihood to classify working women as workaholics according to Burke's (1999a) conceptualization. However, Scott, Moore, and Miceli (1997) state explicitly that workaholism is not simply an extreme case of work involvement. For example, an employee may consider work to play a central role in her or his life, while still being able to leave work at the end of an eight-hour working day and not thinking about it again, until returning to work the following day.

It was found that that professionals and managers, as compared to non-professional and non-managerial workers, had a greater likelihood of being workaholics. It can be argued that workaholics are attracted to professional and managerial positions since these positions are inherently challenging and demand high time investment. However, in view of the positive relation between economic orientation and workaholism, the high monetary rewards associated with these positions may serve as an additional cause for workaholics to occupy them.

Private sector employees, as compared to public sector employees, were found to have greater likelihood of being workaholics. Perhaps not only different kinds of organizations (Schneider, 1987; Schneider, Goldstein, & Smith, 1995) attract, select, and retain different kinds of people, but also entire employment sectors. If it is really so, future formal personnel-

selection procedures should contain examination of a person-employment sector fit, in addition to the conventional assessment of a person-job fit, or the examination of a person-organization fit suggested by Borman, Hanson, and Hedge (1997).

The overall pattern of results remains stable across samples (1981 and 1993). The study's findings are further supported by the fact that the labor force composition did not change significantly between 1981 to 1993 (Harpaz, 1995). However, it should be stressed that even though workaholism is addressed in this study as the predicted variable, the use of cross-sectional, correlational data, drawn from two representative samples of the Israeli labor force, does not allow us to make causal inferences concerning the various hypothesized relationships.

The present study has two major contributions for research on workaholism. First, it was carried out using a non-biased definition of workaholism (Snir & Zhoar, 2000), which does not attribute a priori a positive or negative value to this phenomenon. Thomas, Jansen, and Tymon (1997) claim that construct development is a scientific process, which precision is one of its core quality standards. During construct development, a popular construct is transformed into a more "respectable" theoretical construct. Accordingly, since the term workaholism has a negative association with alcoholism, replacing it by a more precise term, such as workdirected behavior and cognition, is recommended. Secondly, the finding that gender is the strongest predictor of workaholism may indicate that existing conceptualizations of workaholism as an attitude or a trait (e.g., Machlowitz, 1980; Naughton, 1987; Spence & Robbins, 1992) have underestimated the importance of sex-roles in shaping work patterns and behaviors. For example, Etaugh and Folger (1998) examined how married parents are being perceived as a function of their gender and the employment status of both the parent and his or her spouse following their child's birth. Full-time employment, as compared to part-time employment, enhanced perceptions of the professional competence of fathers, but not of mothers and lowered evaluations of nurturance for both parents, but especially for mothers.

The present study is limited in that its measures are based on self-reported data collected through interviews. Future research should also include reports from family, friends, and coworkers (Porter, 1996), as well as some measures of workaholics' behavior patterns (e.g., organizational data concerning overtime work). Additionally, financial needs, as a common kind of external necessities to a substantial time investment in work, were measured in this study by an index that took into account marital status, whether or not the respondent's spouse worked, and the number of people that were financially dependent on the respondent. However, financial needs are not only an objective state, but also a subjective perception. Perceived financial needs might be as important as actual needs. Future research should address this topic. Finally, based on the non-biased definition of workaholism (Snir & Zhoar, 2000), a longitudinal study could be performed in order to examine whether an employee's considerable allocation of time to work-related activities and thoughts is steadfast along years. This may facilitate a more accurate measurement of workaholism. It may also enable causal inferences concerning personal and situational antecedents and outcomes of workaholism in general and possible subtypes (e.g., in accord with Scott, Moore, and Miceli's (1997) typology).

References

- Abbas, A. J, Falcone, T., and Azim, A. A. (1995). Work ethic in the USA and Canada. *The Journal of Management Development*, 14, 26-35.
- Baber, K.M., and Monaghan, P. (1988). College women's career and motherhood expectations: New options, old dilemmas. *Sex Roles*, 19, 189-203.
- Battle, J. (1990). Self esteem: The new revolution. Edmonton, Canada: James Battle.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol. 6). New York: Academic Press.
- Bernard, J. (1981). The good-provider role: Its rise and fall. *American Psychologist*, 36, 1-12.
- Borman, W.C., Hanson, M.A., and Hedge, J.W. (1997). Personnel selection. *Annual Review of Psychology*, 48, 299-337.
- Brief, A., and Nord, W. (1990). Work and meaning: Definitions and interpretations. In A. Brief and W. Nord (Eds.), *The Meaning of occupational work*. Lexington, MA: Lexington.
- Burke, R. J. (1999a). Workaholism in organizations: Gender differences. *Sex Roles*, 41, 5/6, 333-345.
- Burke, R. J. (1999b). Workaholism in organizations: Measurement validation and replication. *International Journal of Stress Management*, 6, 1, 45-55.
- Burke, R. J. (1999c). It's not how hard you work but how you work hard: Evaluating workaholism components. *International Journal of Stress Management*, 6, 4, 225-239.
- Cantarow, E. (1979). Women workaholics. Mother Jones, 6, 56.
- Carroll, J.D., and Chang, J.J. (1970). Analysis of individual differences in multidimensional scaling via an N-way generalization of the 'Eckart-Young' decomposition. *Psychometrika*, 35, 283-319.
- Cherrington, D. J. (1980). *The work ethic*. New York: American Management Association.
- Cooney, T.M., and Uhlenberg, P. (1991). Changes in work-family connections among highly educated men and women, 1970 to 1980. *Journal of Family Issues*, 12, 69-90.
- Deci, E.L., and Ryan, R.M. (1985). *Intrinsic motivation and self determination in human behavior*. New York: Plenum.
- Doerfler, M. C., and Kammer, P. P. (1986). Workaholism, sex and sex role stereotyping among female professionals. *Sex Roles*, 14, 551-560.

- Dubin, R., Champoux, J.E., and Porter, L.W. (1975). Central life interests and organizational commitment of blue collar and clerical workers. *Administrative Science Quarterly*, 20, 411-421.
- Dubin, R., Hedley, R.A., and Taveggia, T.C. (1976). Attachment to work. In R. Dubin (Ed.), *Handbook of Work, Organization and Society* (pp. 281-341). Chicago, IL: Rand McNally.
- Duxbury, L., and Higgins, C. (1994). Interference between work and family: A status report on dual-career and dual-earner mothers and fathers. *Employee Assistance Quarterly*, 9, 3/4, 55-80.
- Dyer, L., and Parker, D. F. (1975). Classifying outcomes in work motivation research: An examination of the intrinsic-extrinsic dichotomy. *Journal of Applied Psychology*, 60, 455-458.
- Eforni, L. (1988). *Women in the civil service: Comparative analysis of the years 1988 versus 1978.* The Training and education Unit, Civil Service Commission, Jerusalem (Hebrew).
- England, G. W. (1991). The meaning of working in the USA: Recent changes. *European Work and Organizational Psychologist*, 1, 111-124.
- England, G. W., and Harpaz, I. (1990). How working is defined: National contexts and demographic and organizational role influences. *Journal of Organizational Behavior*, 11, 253-266.
- England, G.W., and Misumi, J. (1986). Work centrality in Japan and the United States. *Journal of Cross Cultural Psychology*, 17, 399-416.
- Etaugh, C., and Folger, D. (1998). Perceptions of parents whose work and parenting behaviors deviate from role expectations. *Sex Roles*, 39(3-4), 215-223.
- Fassel, D. (1990). Working ourselves to death: The high costs of workaholism, the rewards of recovery. San Francisco, CA: Harper Collins.
- Furnham, A., and Argyle, M. (1998). The psychology of money. London: Routledge.
- Garfield, C. A. (1987). *Peak performers: The new heroes of American business*. New York: William Morrow.
- George, J. M., and Brief, A. P. (1990). The economic instrumentality of work: An examination of the moderating effects of financial requirements and sex on the pay-life satisfaction relationship. *Journal of Vocational Behavior*, 37, 357-368.
- Ghiselli, E.E., Campbell, J. P., and Zedeck, S. (1981). *Measurement theory for the behavioral sciences*. San Francisco: Freeman.
- Harding, S.H., and Hikspoors, F.J. (1995). New work values: In theory and in practice. *International Social Science Journal*, 47, 441-55.

- Harpaz, I.(1988) . Variables affecting non-financial employment commitment. *Applied Psychology: An International Review*, 37, 235-248.
- Harpaz, I. (1990). The meaning of work in Israel: Its nature and consequences. New York: Praeger.
- Harpaz, I. (1995). Final scientific report on: Stability and change in the meaning of work in Israel: A comparison of the labor forces in 1981 and 1993 and longitudinal analysis. Haifa: University of Haifa.
- Harpaz. I. (1999). The transformation of work values in Israel: Stability and change over time. *Monthly Labor Review*, 122, 46-50.
- Harpaz, I., and Fu, X. (1997). Work centrality in Germany, Israel, Japan, and the United States. *Cross Cultural Research*, 31, 171-200.
- Hays, W.L. (1994). Statistics (5th Ed). New York: Harcourt Brace College Publishers.
- Haywood, L., Kew, F., Bramham, P., Spink, J., Capenerhurst, J., and Henry, I. (1989). *Understanding leisure*. London: Hutchinson.
- Higgins, C., Duxbury, L., and Lee, C. (1993). *Balancing work and family: A study of the Canadian private sector*. National Center for Research, Management and Development, University of Western Ontario, London, Canada.
- Hochschild, A. (1989). The second shift. New York: Viking.
- Izraeli, D. (1990). Women, work family, and public policy. In A. Globerson, A. Galin, and E. Rozenshtein (Eds.), *Human resources and labor relations in Israel. New horizons* (pp.327-343). Tel Aviv: Ramot. (Hebrew).
- Kanungo, R.N. (1982). Work alienation: An integration approach. New York: Praeger.
- Kanungo, R.N., and Mendonca, M. (1992). *Compensation: Effective reward management*. Toronto: Butterworts.
- Kaplan, H. R., and Tausky, C. (1974). The meaning of work among the hard-core unemployed. *Pacific Sociological Review*, 17, 185-198.
- Kaufman, G., and Uhlenberg, P. (2000). The influence of parenthood on the work effort of married men and women. *Social Forces*, 78(3), 931-947.
- Kiechel, W. (1989a). The workaholic generation. Fortune, April 10, 50-62.
- Kiechel, W. (1989b). Workaholics anonymous. Fortune, August 14, 117-118.
- Killinger, B. (1991). Workaholics: The respectable addicts. New York: Simon and Schuster.
- Kish, L. (1967). Survey sampling. New York: John Wiley and Sons.

- Klaft, R. P., and Kleiner, B. H. (1988). Understanding workaholics. *Business*, 33, 37-40.
- Klahr, D. (1969). A Monte Carlo investigation of the statistical significance of Kruskal's nonmetric scaling procedure. *Psychometrika*, 34, 319-330.
- Koonce. R. (1998). There's more to life than laptops. *Training and Development*, 52, 15-16.
- Kruskal, J.B., and Wish, M. (1978). *Multidimensional scaling*. Beverly Hills and London: Sage.
- Lawler, E. E. (1971). *Pay and organizational effectiveness: A psychological view.* New York: McGraw-Hill.
- Lawler, E.E. (1994). *Motivation in work organizations*. San Francisco: Jossey Bass.
- Lipset, S. M. (1992). The work ethic, then and now. *Journal of Labor Research*, 13, 45-55.
- Lodahl, T.M., and Keiner, M. (1965). The Definition and measurement of job involvement. *Journal of Applied Psychology*, 49, 23-33.
- London, M. (1983). Toward a theory of career motivation. *Academy of Management Review*, 8, 620-630.
- Machlowitz, M. (1980). *Workaholics. Living with them, working with them.* Reading, Massachusetts: Addison-Wesley Publishing Company.
- Mannheim, B. (1993). Gender and the effects of demographics status and work values on work centrality. *Work and Occupations*, 20, 3-22.
- Maor, M. (1999). Women's advancement in the civil service, 1997-2000: A policy implementation approach. Paper presented at the 34th World Congress of the International Institute of Sociology, Tel Aviv University, Tel Aviv, Israel.
- McAdams, D.P. (1988). Personal needs and personal relationships. In S. Duck (Ed.), *Handbook of personal relationships* (pp. 7-22). Chichester, England: Wiley.
- McClelland, D.C. (1985). Human motivation. New York: Scott Freeman.
- Morrow, P.C. (1983). Concept redundancy in organizational research: The case of work commitment. *Academy of Management Review*, 3, 486-500.
- Mosier, S. K. (1983). *Workaholics: An analysis of their stress, success and priorities.* Unpublished MA thesis, University of Texas at Austin.
- MOW-International Research Team. (1987). *The meaning of work: An international view*. London: Academic Press.
- Naughton, T. J. (1987). A conceptual view of workaholism and implications for career counseling and research. *Career Development Quarterly*, 6, 180-187.

- Nock, S. (1998). Marriage in men's lives. Oxford University Press.
- Nunnally, J.C. (1978). *Psychometric theory*. (2nd Ed). New York: McGraw-Hill.
- Oates, W. (1971). *Confessions of a workaholic: The facts about work addiction.* New York: World Publishing.
- Osigweh, C.A.B. (1989). Concept fallibility in organizational science. *Academy of Management Review*, 14, 579-594.
- Pinder, C.C. (1998). *Work motivation in organizational behavior*. Upper Saddle River, NJ: Prentice Hall.
- Pittman, J. F. and Orthner, D. K. (1988). Gender differences in the prediction of job commitment. *Journal of Social Behavior and Personality*, 3, 227-248.
- Porter, G. (1996). Organizational impact of workaholism: Suggestions for researching the negative outcomes of excessive work. *Journal of Occupational Health Psychology*,1, 70-84.
- Porter, G. (2001). Workaholic tendencies and the high potential for stress among co-workers. *International Journal of Stress Management*, 8(2), 147-164.
- Robinson, B. E. (1989). Work addiction. Deerfield Beach, FL: Health Communications.
- Robinson, B. E. (1997). Work addiction: Implications for EAP counseling and research. *Employee Assistance Quarterly*, 12(4), 1-13.
- Robinson, B. E., and Post, P. (1995). Work addiction as a function of family of origin and its influence on current family functioning. *The Family Journal*, 3, 200-206.
- Robinson, B. E., and Post, P. (1997). Risk of work addiction to family functioning. *Psychological Reports*, 81, 91-95.
- Rohrlich, J. (1980). Work and love: The crucial balance. New York: Harmony.
- Rothman, R.A. (1998). *Working: Sociological perspectives* (2nd Ed). New Jersey: Prentice-Hall.
- Ruiz–Quintanilla, S. A., and Wilpert, B. (1991). Are work meanings changing? *European Work and Organizational Psychologist*, 1, 91-109.
- SAS (1992). The MDS procedure. In SAS technical report P-229, SAS/STAT software changes and enhancements, release 6.07 (pp. 249-286). Cary, NC: SAS Institute.
- Schaef, A.W., and Fassel, D. (1988). *The addictive organization*. San Francisco, CA: Harper Row.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.

- Schneider, B., Goldstein, H.W., and Smith, D.B. (1995). The ASA framework: An update. *Personnel Psychology*, 48, 747-773.
- Scott, K. S., Moore, K. S., and Miceli, M. P. (1997). An exploration of the meaning and consequences of workaholism. *Human Relations*, 50, (3), 287-314.
- Seybold, K. C. and Salomone, P. R (1994). Understanding workaholism: A review of causes and counseling approaches. *Journal of Counseling and Development*, 73, 4-10.
- Snir, R. (1998). *Workaholism: Description, definition, measurement, and validation.* Ph.D. Dissertation, The Technion Israel Institute of Technology, Haifa, Israel (Hebrew).
- Snir, R. and Zohar, D. (2000). *Workaholism: Work-addiction or workphilia?*Paper presented at the International Conference on Psychology Psychology after the year 2000, University of Haifa, Haifa, Israel.
- Spence, J. T., and Robbins, A. S. (1992). Workaholism: Definition, measurement, and preliminary results. *Journal of Personality Assessment*, 58, (1), 160-178.
- Sprankle, J. K, and Ebel, H. (1987). The workaholic syndrome. New York: Walker.
- Statistical Abstracts of Israel. (1995). Jerusalem: Government Publications.
- Tang, T. L. (1992). The meaning of money revisited. *Journal of Organizational Behavior*, 13, 197-202.
- Tennesen, M. (1994). HR faces distinct issues in rural areas. *Personnel Journal*, 73, 112-120.
- Thomas, K.W., Jansen, E., and Tymon, W.G. (1997). Navigating in the realm of theory: An empowering view of construct development. In W.A. Pasmore and R.W. Woodman (Eds.), *Research in Organizational Change and Development* (vol. 10). Greenwich, CT: JAI Press.
- Vecchio, R. P. (1980), The function and meaning of work and the job: Morse and Weiss (1955) revisited. *Academy of Management Journal*, 23, 361-367.
- Vroom, V.H. (1962). Industrial social psychology (2nd Ed). In G. Lindzey and E. Aronson (Eds.), *The Handbook of Social Psychology*, 5, 196-268.
- Waddell, J. R. (1993). The grindstone. Supervision, 26, 11-13.

 $TABLE\ 1:\ The\ main\ alternative\ views\ concerning\ work aholism$

Workaholism as a Positive Phenomenon	Workaholism as a Negative Phenomenon	Existence of Different Types of Workaholics
Workaholism as derived from the love of work (Cantarow, 1979).	Workaholism as irrational commitment to excessive work (Cherrington, 1980).	Job-involved, compulsive (Naughton, 1987).
Workaholism as an intrinsic desire to work long and hard (Machlowitz, 1980).	Workaholism as an addiction (Killinger, 1991; Oates,1971; Porter, 1996; Robinson,1989; 1997; Schaef & Fassel,	Workaholic, enthusiastic workaholic, [work enthusiast not regarded as a workaholic] (Spence & Robbins, 1992).
	1988).	Compulsive-dependent, perfectionist, achievement oriented (Scott, Moore & Miceli, 1997).
		1,1100ti, 1997).

TABLE 2: Descriptive statistics of the research variables for the representative samples of the Israeli labor force in 1981 and 1993^a

Research Variables	1981 S	ample	1993 S	ample	Number of Items
	Mean	SD	Mean	SD	
Work centrality	4.10	.95	4.16	.92	2
Expressive orientation	3.68	.87	3.68	.86	3
Economic orientation	3.81	1.41	4.62	1.41	3
Interpersonal relations	3.32	.95	3.10	.98	3
Total weekly work hours	41.40	14.08	44.69	14.16	1
Financial needs	3.83	1.98	3.17	1.83	3

^a The four MOW variables were constructed from questions based on different scale values; their items were transformed into a scale ranging from 1(low) to 7 (high).

TABLE 3: Hierarchical regression results (standardized coefficients) for total weekly work hours as a predicted variable

Variables	Step 1	Step 2	Step 3
Control variables			
Financial needs	.077**		
Labor force sampling year		.173***	
Predictor variables			
Work centrality			.135***
Expressive orientation			009
Economic orientation			.101**
Interpersonal relations			.028
Gender			413***
Occupation type			.064*
Employment Sector			.074**

^{*} p <.05; ** p <.01; *** p <.001.

TABLE 4: Adjusted means and standard deviations of total weekly work hours in a multivariate analysis of variance, with financial needs score as a covariate

Variable	Adjusted Mean	SD	
1981 Sample			
Married women	32.99	10.79	
Unmarried women	37.90	13.60	
Married men	47.96	12.66	
Unmarried men	45.04	12.83	
1993 Sample			
Married women	37.02	11.50	
Unmarried women	38.67	11.56	
Married men	51.13	12.79	
Unmarried men	48.29	15.93	

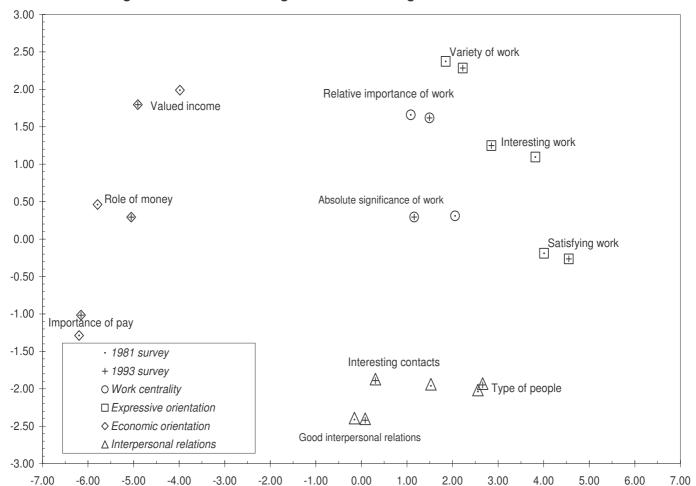


Figure 1: Canonical Configuration of meaning of work indices