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Being, Having and Doing Modes of Existence: Confirmation and Reduction of a New Scale Based on a Study among Israeli Female Teachers, Student-Teachers and Counselors*

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AUTHOR'S NOTE

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Introduction: Modes of Existence (MoE)

- 1 The nature of human personality has always constituted an enigma for anyone who seeks to understand the commonalities and differences among people. The countless attempts of behavioral scientists to solve this enigma have yielded many theories focusing on selected aspects of human nature. Some of these are comprehensive in scope and purpose, while others are limited. Thus it transpires that in psychology, there is a long history of attempts to classify people according to types and needs, with every theory exposing or relating to a few aspects of the human personality and developing new directions based on the existent ones. Currently one of the most widely used approaches is the "Big Five" psychological dimensions of personality, a descriptive taxonomy of trait theory derived from factor analyses of many self- and peer-reports on personality-

relevant adjectives and questionnaire items. The five factors are extroversion-introversion, neuroticism, agreeableness, conscientiousness and openness (Ewen 1998).

- 2 Another important theory relevant to this discussion is the Schwartz typology of values, developed over the course of a decade (Schwartz 1999; Schwartz and Bilsky 1987; Schwartz and Sagiv 1995). Schwartz refined Rokeach's (1973; 1976) typology of 36 values, which were divided into two categories: personal or social end values and moral or beneficial instrumental values. Schwartz and colleagues expanded the list of values to 56 and proposed a universal typology of ten value-types: self-direction, universalism, benevolence, conformity, tradition, security, power, achievement, hedonism and stimulation. Schwartz notes two sets of general moral positions: self-transcendence versus self-enhancement and conservation versus openness to change.
- 3 The theoretical paradigm present in this article reflects the manner in which people define their identity along dimensions that can predict their behavior in the realms of education, employment, human relations, and a variety of everyday life situations. The paradigm was constructed according to Erich Fromm's psychological theory (1976) as it appeared in his book, *To Have or To Be?* In this book, Fromm discusses Modes of Existence (MoE) that are perceived as a basic orientation factor that is relatively stable. The factor is a part of the individual's personality structure and directs his everyday behavior. Fromm's basic premise states that beyond the endless variety that characterizes human behavior, the individual manifests great consistency regarding the way in which he reacts to his external and internal worlds.
- 4 According to Fromm's definition, this is how the MoE describes the individual's fundamental approach or characteristic behavior by means of which he reacts to his outer and inner world of stimuli. The MoE refers to a broad range of behavioral dimensions and fields of action. It does not refer to any specific content, namely, "what," but focuses mainly on "how," that is, the manner in which the individual reacts to a broad range of stimuli (Reichenberg 1996).
- 5 Fromm's approach is mainly philosophical, but he extends his theory into practical-behavioral realms as well. According to Fromm (1976), two basic MoE direct human behavior. The first is *Being* and the second is *Having*. In his opinion, these two modes reflect the individual's two different attitudes toward the self and the world – attitudes that determine the way he thinks, feels, and acts.
- 6 Basing his work on a variety of theoretical sources that discuss basic human tendencies to act and to do, Rand (1993) added a third MoE – *Doing* – to Fromm's dual model. Rand's triadic model is based on the existence of three MoE: *Being*, *Having*, and *Doing*. According to his thinking, the three exist concurrently in each individual's personality, but one mode generally dominates the two others. The existence of these tendencies and the dominance of one of them is not limited only to individual behavior, but constitutes an array of universal forces that have directed the development of human society in its entirety and characterized a range of diverse religions and world-views throughout human history (Rand & Tannenbaum 1998).
- 7 The Mode of Existence theory is an attempt to organize trait theory based on philosophical concepts rather than psychological ones. The concepts expressed in the triadic *Being-Having-Doing* model can be integrated with one of more factors of the "Big Five". For example, a person for whom the openness trait is dominant may be primarily in the *Being* mode of existence. Similarly, the Mode of Existence theory may be related to

Schwartz's structure of values. For example, an individual who emphasizes values of self-enhancement may be found in the *Having* mode of existence. Further research will be needed to explore the connections between these theories.

The *Being* MoE

- 8 Fromm (1976) defined the concept of *Being* as the individual's tendency to grow, love, and advance toward self-realization. People with this tendency have an inner orientation that is directed to their personality. They aspire to fulfill their hidden potential in various ways, some of which are general by nature, such as artistic modes of expression, choice of profession or occupation, fundamental ways of thinking, and so on. A person can find a meaningful existence in his life by, among other things, his own interactive qualities, and by the development of options for self-expression. Other ways are more fundamental by nature, for instance specific modes of interaction with other people in relation to everyday events, and so on. According to Fromm, the prerequisite conditions for self-realization include perception of oneself as a person with psychological independence and an ability to activate control mechanisms based on logic and on methods of adaptation *vis-à-vis* one's own behavior.

The *Having* MoE

- 9 Fromm defined the concept of *Having* as the individual's tendency to relate to the world as well as to his occupation and relations with people in an acquisitive and controlling manner. This tendency, however, is not limited to the material world, but also refers to the abstract and spiritual world. The tendency toward acquisitiveness, which is inherent in human beings, is also natural in modern "consumer society," where one aspires to acquire as many objects as possible. The individual acquires things not only in order to derive direct enjoyment from them, but also as status symbols (Dittmar 1992).
- 10 People with a *Having* MoE generally manifest an external orientation of control toward people, property, or knowledge. This acquisitiveness is evident in the way the individual channels his energy into the need to dominate various external elements and take possession of them. According to this MoE, the person is what he consumes and what he owns or controls. Modern consumer society, which characterizes the modern technological world of the West, is also based, to a large extent, on a hierarchy that is anchored in property and its external trappings. Although it includes other trends as well, in many respects it is founded on both the individual's and society's emphasis on the *Having* tendency.

The *Doing* MoE

- 11 The *Doing* MoE, as proposed by Rand (1993), refers to the individual's tendency toward acting, doing, and deriving satisfaction from the actual process of doing. This tendency is based on the individual's deep-seated need to change his surroundings or the world of stimuli confronting him in order to adapt it to his own purposes, needs, and aspirations. This fundamental tendency is expressed in a massive diversion of inner energy into the act of doing and into the fostering of the ability to accomplish at different levels, motivated by a feeling of indispensability and creativity. A person who has a *Doing* model

knows “who he is” by what he does and by the creation of conditions necessary to realize his goals.

- 12 People who are characterized by a high level of this tendency can serve as catalysts for people who work with them in their vicinity as well as for people who are under their direct supervision. In this way, their activity can serve as a broad basis for the realization of many people’s aspirations and desires. Thus, we can see this MoE as simultaneously directed toward the individual himself and outward – in other words, the physical and human environment. The tendency toward *Doing* is also one of the prominent characteristics of society and the individual alike. Popular slang refers to people with this attitude as “doers”; that is, people who have the ability and the inclination to accomplish complicated tasks and missions that have the potential to change the surroundings and way of life of many people.
- 13 *In summary:* The main difference between the three MoE lies in the direction of the individual’s tendency and the manner in which he invests his energy. While the energetic orientation of the *Being* MoE is mainly directed at the individual’s cultivation and development of his personality, the energetic orientation of the *Having* MoE is directed at acquiring control over external things such as people, material things, and different types of knowledge. The fundamental orientation of the *Doing* MoE is expressed in the perception of the principal aim of life as accomplishing things mainly for the good of both the individual and society (Sagee 1999).
- 14 In order to illustrate the differences between the three MoE, we will relate them to the learning process. The principal aim of learning for the person who is characterized by the *Being* MoE is the acquisition of knowledge for the sake of enriching his inner self as much as possible so that he can attain a higher and more varied level, and so on. In contrast, the principal aim of learning for the person who is characterized by the *Having* MoE is to acquire knowledge and control it, just as he controls his material possessions, and to use it as an instrument for increasing his ability to control others or to acquire possessions for himself. Conversely, the person with the *Doing* MoE tends to turn his knowledge mainly into a tool by means of which he can accomplish his tasks more effectively. For him, the acquisition of knowledge provides him with the means for doing things in a better and more efficient way in the framework of his efforts to alter his surroundings and/or the society in which he lives and operates.
- 15 The following table describes the characteristics of the triadic model in the interaction.

	<u>The <i>Being</i> MoE</u>	<u>The <i>Having</i> MoE</u>	<u>The <i>Doing</i> MoE</u>
Aims	To direct himself in the direction of empowerment; to advance toward self-realization	To direct himself to relate to the world in an acquisitive manner	To direct himself to act, to do, and to derive satisfaction from the fact of doing
Ways of realization	Fulfilling the potential in various ways, such as art, choice of profession, etc.	Fulfilling the potential by means of the acquisition of knowledge or property in order to control	Fulfilling the potential by doing, carrying out, and a feeling of indispensability

Empirical results on the MoE

- 16 In this article, we apply Facet Theory and Factor Analysis analytical techniques to data collected and previously published by two of the authors, Reichenberg (1996) and Sagee (1999). An instrument, "MoE Scale," was constructed to measure the level of the three modes (Reichenberg 1996). It was constructed from 51 statements ranked on a Likert scale.
- 17 Studies were conducted to identify the dominant Mode and the hierarchy of the different Modes that characterize the research population (Reichenberg 1996; Sagee 1999). The research group was comprised of 109 students from colleges of education, 76 cooperating teachers, and 201 educational counselors. All of the respondents were female.
- 18 Studies based on this scale (Reichenberg 1996; Sagee 1999) have shown: a) the reliability of the questionnaire is high (Alpha M-7 to 88); b) a hierarchy exists in the population of teachers. This finding exists in the population of varied education; c) differentiation exists between the populations on the level of the modes; d) relationships exist between the modes and different variables like: the level of religiosity, positions regarding instruction and the like. These findings point to the validity of the questionnaire and the validity of the prediction.
- 19 The results showed clearly that the prominent MoE among the three groups – students, teachers, and counselors – was *Being* followed by *Doing*, and finally *Having*. This hierarchical pattern (B>D>H) is characteristic of the three research groups, but the dominance of *Being* is especially prominent in the teacher and counselor groups.
- 20 Findings showed statistically significant differences between religious and non-religious educators concerning the *Doing* MoE. The level of this MoE was higher among the religious teachers.

Methodology: A Multi-Dimensional Approach

Facet Theory

- 21 The data from Reichenberg and Sagee's study are treated here using Facet Theory and Factor Analysis. Facet Theory was developed by Louis Guttman (1959, 1968, 1982) as a way to organize analyses of multi-dimensional, multi-faceted systems. In explaining Facet Theory, Guttman first addresses the concept of "theory". A theory, according to Guttman, is an hypothesis of a "...correspondence between a definitional system for a universe of observations and an aspect of the empirical structure of those observations, together with a rationale for such an hypothesis," (Guttman quoted in Gratch 1973: 35).

The Concept of a Mapping Sentence

- 22 In order to allow a systematic design of the field under investigation, Guttman introduced the concept of a mapping sentence. A mapping sentence outlines the theoretical basis of a study. A mapping sentence contains a variety of facets. Each facet is one way of classifying the research variables. A properly defined set of "m" facets provides an "m" – waysimultaneous classification of variables, namely, a mapping sentence. Each facet in the mapping sentence is specified as having a certain formal role in interpreting aspects

of the observed empirical data. (Guttman 1959, 1965; Levy 1976, 1985). The mapping sentence technique for designing a definitional system for observations is proving to be useful in research efforts: "It permits the scientist to state explicitly the differential aspects of the observation procedure that he considers relevant, by including them as facets of the observation. (...) Much 'noise' is typically present in empirical observation, and there is no reason to believe that the various sources of noise are independent. Expressing explicitly unremovable noise sources by means of facets permits a systematic and communicable recording of interfering experimental conditions," (Shye 1978: 22).

- 23 For complex systems, such as human personality, designing the mapping sentence and identifying the facets is not a simple task. As Louis Guttman claims: "The problem of proposing fruitful facets to the design of the content for a system of variables has generally been found to be a far more difficult one than for that of proposing background variables or experimental conditions for populations," (Guttman quoted in Levy 1994).
- 24 The most basic mapping sentence has the following format:



- 25 Though the mapping sentence introduces formality, it is a flexible device as it can easily, but systematically, be enlarged or condensed by adding or reducing facets or elements within the facets.

The Correlation Matrix

- 26 The mapping sentence is used to help articulate the design of a study. Guttman also developed techniques for analyzing empirical data collected in a study. Multi-dimensional scaling techniques make it possible to simultaneously compare a large number of variables and to graphically portray the underlying structure of the data.
- 27 The first step in conducting the analysis is the calculation of a matrix of the correlation between the chosen variables. The Monotonicity Coefficient (MONCO) procedure, a regression-free coefficient of correlation (Guttman 1986, pp. 80-87) was used.¹ The analysis was performed with the help of a statistical analysis package, the Hebrew University Data Analysis Package (Borg 1981; Canter 1985; Guttman 1968, 1982; Levy 1994; Amar and Toledano 2002). The program calculates the correlations between each pair of the 51 items.

The Smallest Space Analysis

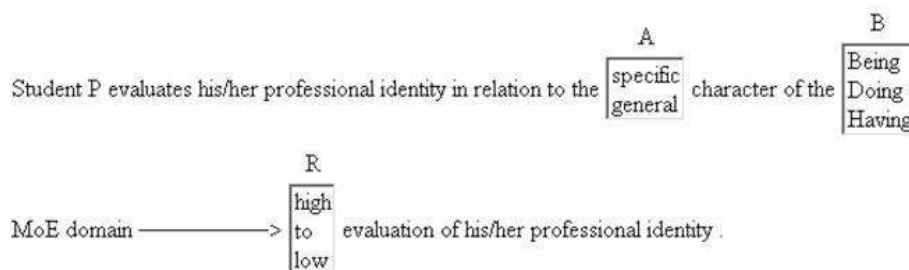
- 28 In this analysis, a technique known as Smallest Space Analysis (SSA) is used to graphically plot the information from the correlation matrix onto a cognitive "map". SSA analyzes a matrix of correlations between items by representing them as points in a Euclidean space called the "smallest space". The points are plotted according to the principle: the higher the correlation between two items, the closer they are on the map and, conversely, the lower the correlation, the further apart they are (Guttman 1968; Levy 1985, 1994). The

map helps in perceiving the various relationships between the items by revealing distinct regions of correlated data (Guttman 1968, 1982; Canter, 1985; Levy 1994; Shye 1978). This methodology was applied because it has proven successful in many previous studies analyzing attitudes (Ben-Sira and Guttman 1971; Canter 1985; Cohen 2003, 2004; Cohen, Clifton and Roberts 2001; Levy 1994; Schwartz and Bilsky 1987, 1990, among many others). Maraun (1997) applied it to the Big Five of trait theory. In a two-dimensional SSA, Maraun shows the radex structure of the five personality traits, a result not possible using factor analysis. Schwartz's typology of values also utilizes the Facet Theory approach. His typology is graphically represented as a two-dimensional model showing categories of compatible and incompatible value-types. However, the purpose here is not to champion one particular technique of multi-dimensional analysis, but to attempt to understand the data using an appropriate analytic tool.

- 29 The SSA map is then interpreted based on content. The researcher, guided by the theoretical basis of the study as outlined in the mapping sentence, looks for a structure. By definition, a structure can be found for any data in $n-1$ dimensions, where n equals the number of items in the correlation matrix. Therefore, the smaller the number of dimensions necessary to discern a structure, the stronger the significance of the findings. There are a number of different structures which can be recognized in SSA maps; polar (regions emanating from a central point), modular (concentric circles), axial (consecutive slices), and combinations of these three basic structures. Each of these structures itself tells much about the nature of the system under investigation (Levy 1985). It is possible for the same map to be interpreted in several different, though equally valid ways, depending on the emphasis of the study. The location of the items in the space is "objective" in the sense that they are based on their inter-correlation, but the interpretation of the relationship between them is "subjective".

Regional Hypothesis

- 30 According to the regional hypothesis, for each element of the facet considered, there will be a specific and contiguous region in a geometric representation of the various items analyzed (i.e. the SSA map). This means there will be a clear-cut distinction among the various items according to the facet definition of each item. We expect contiguity of the items belonging to the same facet element. The region in an SSA map is defined semantically and not in terms of pure proximity. The region is not necessarily a cluster. For example, items within regions of concentric circles are contiguous, but not near each other in the space.
- 31 Based on the results of the research presented in this article, it is possible to formulate a general mapping sentence, which could serve as a basic hypothesis for future cross-cultural studies of professional identity.



Results

- 32 *Factor Analysis:* A Factor Analysis with a limitation of three factors was conducted. The results are shown in Table 1. A full confirmation of the three Modes of Existence with these three factors was found. The first factor explains 16.7% of the variance, the second explains 10.6% and the third explains 6.9%. The total percentage of variance explained by the three factors is 34%.

Table 1: Factor Analysis

Doing			
2...A person must be evaluated according to what he does.		.303	
4. There is no greater enjoyment than doing.		.665	
7. A day without doing is a lost day.		.430	
10. Good social activity is characterized by taking initiative to organize social encounters.		.347	
14. It is not Studying, but Doing, which is crucial.		.570	
18...A good school prefers active doing to traditional frontal teaching.		.444	
20. I am active means I live.		.554	
24...A person's uniqueness is measured according to his deeds.		.622	
29. Profit is not important, the main thing is to be a partner in doing.		.540	
31. Education must be directed towards doing.		.725	
34...A satisfying life is a life in which the person acts and does.		.711	
36. Instead of examining the student's knowledge, his deeds should be considered.		.479	
37. Significant learning is active learning.		.424	
38. Every moment without doing is a wasted one.		.634	
41. The very fact of doing heals the soul.		.630	
44. It is important to volunteer, especially for tasks that involve real activity.		.517	
46...A good political regime is one that gets things done.		.359	
48. The person whose deeds exceed his wisdom, the wisdom will prevail.		.668	

Having			
3... A good teacher is the one who controls his class.			.328
6. The main objective in life is to make money.	.698		
8. A good learner is the one who accumulates knowledge.	.353		
12. Children should be educated to continue to accumulate assets in addition to what they received from their teachers.	.585		
16. Love is a feeling that you possess something.	.385		
19. The main aim of every political regime is to attain economic achievements.	.569		
23... A successful person is one who has a fancy house, a luxury car, etc.	.716		
26. It is preferable to have a prestigious hobby, which offers possibilities to accumulate and possess valuable things.	.733		
28. Reading books is important when it leads to the acquisition of knowledge.	.310		
32. In the choosing a profession or an occupation, maximum preference has to be given to the extent of income and profit that can be derived from it.	.698		
35. Learning that has no material reward is not learning, but rather a waste of time.	.695		
39... A person's success is measured according to what he has.	.577		
42. It is important for a person to have documents attesting to his achievements.	.616		
45. The main aim of studying at school is to get a matriculation certificate.	.429		

47. Invest every penny you earn so as to make additional profits.	.604		
49... A person feels secure when he has a great deal of property and a large income.	.508		
51. Happiness of a person is contingent upon his ability to acquire what he desires.	.606		
Being			
1. Freedom to express opinions is a very important value.			.637
5. It is most important for a person to renew himself in those areas in which he is active.			.521
9. It is important for every person to attain full self-realization.			.593
11. The quality of a school is measured according to the extent of its contribution to the development of unique talents.			.304
13. The essence of a person is manifested by the ability to express himself.	.358		.335
15. Meaningful learning is that which affects the learner and causes him to change.			.415
17. I think means I exist.			.570
21. Self-criticism is necessary for good teaching.			.590
25. Education cannot be called as such, without education for values.			.575
27... A good learner is the one who develops himself by the acquired knowledge.			.492
30. Self-realization is the supreme goal of life.			.614
33. Inner authority is true authority.			.526
40. It is important that the political regime should permit the individual to express his views.			.657

43. Reading books is an important component in a person's development.			.521
50. It is preferable to choose an occupation that enables one's wishes to come true.			.528

33 Following the factor analysis, a SSA was conducted in order to portray the structure of the data. The correlation matrix, the first step in the SSA procedure, is shown in Table 2. Because of the size of the matrix, it is divided into two sections. According to Guttman's First Law of Attitude, "If any two items are selected from the universe of attitude items towards a given object, and if the population observed is not selected artificially, then the population regressions between these two items will be monotone and with a positive or zero sign" (Gratch 1973; Guttman 1981). The correlations may range from -100 to +100, as they have been multiplied by 100 and rounded off as integer numbers. We can see that in this case not all of the correlations are positive, and some have negative correlations, generally very slight. The overwhelming majority of the correlations is positive (more than 90%), most are moderately so (less than +70).

Table 2: MONCO (MONotonicity COefficient) between the 50 items

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
MOE1	1	100	21	8	21	53	13	-27	21	48	19	33	-4	28	15	43	15	48	13	26	27	57	10	14	42	-22	38	-7	3	49
MOE2	2	21	100	56	38	9	37	30	40	0	37	25	16	15	43	23	16	17	8	29	39	10	35	64	10	22	11	18	6	5
MOE3	3	8	56	100	35	20	23	29	37	6	27	22	26	15	29	-2	11	3	6	24	21	12	26	34	12	21	12	15	5	8
MOE4	4	21	38	35	100	32	-2	59	37	40	49	10	6	27	59	32	14	19	27	11	56	40	-15	62	35	-8	17	8	54	40
MOE5	5	53	9	20	32	100	18	6	24	47	3	23	9	21	12	35	11	35	3	22	29	54	5	15	50	-2	35	-13	11	35
MOE6	6	13	37	23	-2	18	100	5	24	-27	37	14	95	32	14	4	31	17	-10	48	19	-11	78	31	-25	70	-2	13	-22	13
MOE7	7	-27	30	29	59	6	5	100	32	28	24	20	14	25	45	14	6	-4	19	12	38	2	-2	51	10	12	-13	9	36	11
MOE8	8	21	40	37	37	24	24	32	100	23	46	26	29	42	33	20	28	20	5	30	24	14	24	33	5	27	21	24	10	23
MOE9	9	48	0	6	40	47	-27	28	23	100	32	31	1	42	25	43	21	52	19	-2	46	55	-23	20	65	-37	27	4	31	76
MOE10	10	19	37	27	49	3	37	24	46	32	100	46	41	58	50	32	42	30	38	23	49	21	26	55	19	37	19	27	23	40
MOE11	11	19	25	22	10	23	14	20	26	31	46	100	33	57	32	40	22	29	20	32	23	32	21	36	25	25	37	18	9	50
MOE12	12	-4	16	26	6	9	55	14	29	1	41	33	100	43	19	-2	39	31	4	45	34	-10	55	15	-11	59	-1	28	-18	31
MOE13	13	28	15	15	37	21	32	25	42	52	58	57	43	100	40	35	39	40	21	38	35	20	26	45	26	25	27	31	16	63
MOE14	14	15	43	29	59	12	14	45	33	25	50	32	19	40	100	44	19	7	36	27	47	37	7	62	42	9	22	9	31	28
MOE15	15	43	23	-2	32	35	4	14	20	43	32	40	2	35	44	100	34	43	19	12	48	54	-12	36	53	-8	48	10	30	36
MOE16	16	15	16	11	14	11	31	6	28	21	42	22	39	33	19	34	100	63	32	47	48	32	35	26	11	30	12	27	19	23
MOE17	17	48	17	3	19	35	17	-4	20	52	30	29	31	40	7	43	63	100	23	37	65	58	16	36	46	3	31	11	20	57

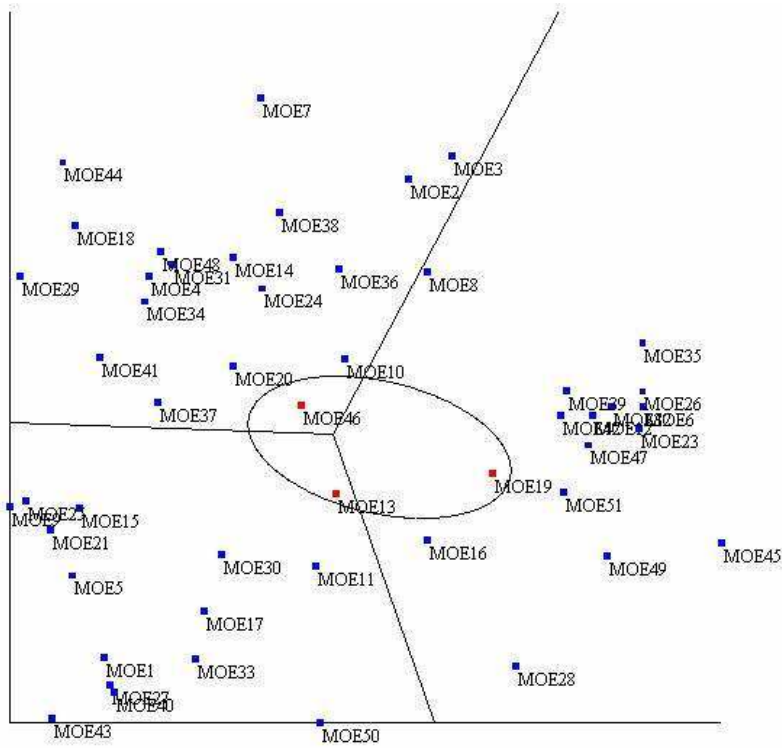
MOE18	18	13	8	6	27	3	-10	19	5	19	38	20	4	21	36	19	32	23	100	45	34	29	-9	29	20	4	6	15	40	28
MOE19	19	26	25	24	11	22	48	12	30	-2	33	32	45	38	27	12	47	37	45	100	45	8	56	27	13	54	3	31	15	46
MOE20	20	27	39	21	56	29	19	38	24	46	49	23	34	35	47	49	48	65	34	45	100	49	33	62	41	24	20	13	38	48
MOE21	21	57	10	12	40	54	-11	2	14	55	21	32	-10	20	37	54	32	58	29	8	49	100	-17	32	70	-26	43	1	31	42
MOE23	22	10	35	26	-15	5	78	-2	24	-23	26	21	55	26	7	-12	35	16	-9	56	33	-17	100	29	-25	78	-10	20	-25	15
MOE24	23	14	64	34	62	15	31	51	33	20	55	36	15	45	62	36	26	16	29	27	62	32	29	100	46	28	25	27	39	29
MOE25	24	42	10	12	35	50	-25	10	5	65	19	25	-11	26	42	53	11	46	20	13	41	70	-25	46	100	-28	44	-1	44	48
MOE26	25	-22	22	31	-8	-2	70	12	27	-37	37	25	59	26	9	-8	30	3	4	54	24	-26	78	28	-28	100	3	43	-11	9
MOE27	26	38	11	12	17	35	-2	-13	21	27	19	37	-1	27	22	48	12	31	6	3	20	45	-10	25	44	3	100	28	17	39
MOE28	27	-7	18	15	8	13	13	9	24	4	27	18	28	31	9	10	27	11	15	31	13	1	20	27	-1	43	28	100	25	28
MOE29	28	3	6	5	54	11	-22	36	10	31	23	9	-18	16	31	30	19	20	40	15	38	31	-25	39	44	-11	17	25	100	37
MOE30	29	49	5	5	40	35	13	11	23	76	40	50	31	63	28	36	33	57	28	46	48	42	15	29	48	9	39	28	37	100
MOE31	30	24	42	39	58	48	1	49	30	38	36	12	5	16	59	27	9	18	38	26	71	46	3	59	42	4	15	3	37	30
MOE32	31	11	31	40	8	13	66	8	35	-22	29	15	57	27	13	-10	20	7	-8	51	21	1	64	22	-13	68	15	22	-20	11
MOE33	32	35	-1	11	21	19	11	-3	22	49	37	34	13	47	0	28	29	57	9	12	32	40	17	23	37	9	42	17	18	54
MOE34	33	24	39	31	73	29	4	49	33	46	47	9	13	32	52	23	19	34	36	5	71	34	8	62	43	3	15	10	46	33
MOE35	34	-17	21	28	0	-2	59	23	35	-29	40	19	57	36	12	-3	35	-7	13	44	22	-20	66	26	-38	80	-18	40	-10	2
MOE36	35	3	28	26	44	18	36	37	25	3	44	33	24	39	41	20	41	21	35	31	40	16	24	53	11	38	10	15	42	31
MOE37	36	31	14	12	44	20	14	23	13	29	46	41	6	34	28	39	27	20	46	25	42	48	10	45	46	17	32	14	43	36
MOE38	37	-21	23	31	59	24	6	77	35	23	45	36	22	39	53	21	27	15	30	19	55	18	21	62	17	25	-5	13	43	20
MOE39	38	6	32	17	0	7	56	11	25	-10	37	24	61	32	31	5	45	21	6	46	34	0	74	32	-2	67	8	26	-4	25
MOE40	39	77	14	4	15	39	-1	-18	15	39	10	19	-4	24	11	32	6	40	5	14	22	58	6	16	48	-8	52	-2	9	37
MOE41	40	43	13	15	73	36	3	33	27	44	38	6	10	25	46	35	19	36	27	6	64	42	-3	53	48	-4	27	0	53	42
MOE42	41	5	29	27	8	23	44	25	27	0	35	25	53	23	24	14	35	25	15	54	30	1	51	19	10	60	-3	37	-4	25
MOE43	42	39	5	-6	-1	52	-10	-26	-11	33	3	24	-7	14	3	29	16	41	10	18	16	46	-3	6	54	-21	31	21	9	32
MOE44	43	-4	31	20	32	29	-13	29	14	19	33	17	-13	4	27	12	-1	4	31	12	40	20	0	36	27	-7	3	5	38	6
MOE45	44	-12	15	6	-8	-9	35	10	-1	-17	10	16	22	11	17	2	15	4	15	55	-1	-8	33	-1	-11	36	-12	9	-7	8
MOE46	45	28	34	24	37	20	19	7	28	33	45	28	31	27	45	21	33	26	30	57	53	42	31	39	38	29	25	11	16	28
MOE47	46	0	10	15	10	25	55	11	18	-7	33	14	52	29	21	5	36	14	21	57	29	-10	63	19	-9	61	-1	36	5	24
MOE48	47	8	29	27	67	26	15	39	15	25	34	26	6	35	56	35	13	10	20	11	53	33	-1	53	34	15	21	19	59	25
MOE49	48	21	9	21	0	21	58	-3	13	-19	8	13	26	17	33	-1	26	12	1	56	21	1	69	10	2	48	7	8	-9	12
MOE50	49	33	-1	12	17	31	11	-21	29	22	15	30	25	34	3	26	21	20	9	33	11	37	19	4	32	13	55	24	14	50
MOE51	50	7	19	22	24	-1	50	14	38	-3	33	16	52	41	14	11	44	24	8	46	23	6	46	30	9	61	3	38	2	32

	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
MOE31	30	100	19	6	67	9	33	36	56	25	23	64	27	6	54	-6	59	16	62	16	7	4
MOE32	31	19	100	16	24	64	26	14	7	58	14	13	53	-10	-11	43	42	58	8	52	30	49
MOE33	32	6	16	100	44	0	24	27	10	3	48	45	0	32	19	-4	23	-10	15	7	40	23
MOE34	33	67	24	44	100	-5	37	49	45	10	24	80	6	24	54	-11	55	5	65	5	2	13
MOE35	34	9	64	0	-5	100	48	16	40	68	-20	-7	58	-38	-5	30	11	64	8	30	10	57
MOE36	35	33	26	24	37	48	100	51	57	38	-2	44	14	-4	28	6	25	26	51	24	19	37
MOE37	36	36	14	27	49	16	51	100	48	23	41	52	13	33	21	-2	45	22	46	12	21	12
MOE38	37	56	7	10	45	40	57	48	100	35	-8	46	34	-15	31	8	37	34	47	6	-9	19
MOE39	38	25	58	3	10	68	38	23	35	100	6	10	64	-9	-8	26	35	67	18	42	25	47
MOE40	39	23	14	48	24	-20	-2	41	-8	6	100	38	3	58	3	-15	41	9	11	36	52	0
MOE41	40	64	13	45	80	-7	44	52	46	10	38	100	5	22	43	-13	51	5	64	2	19	10
MOE42	41	27	53	0	6	58	14	13	34	64	3	5	100	1	0	54	40	58	15	46	23	46
MOE43	42	6	-10	32	24	-38	-4	33	-15	-9	58	22	1	100	41	-7	17	3	9	17	34	-1
MOE44	43	54	-11	19	54	-5	28	21	31	-8	3	43	0	41	100	8	26	1	52	3	-4	-4
MOE45	44	-5	43	-4	-11	30	6	-2	8	26	-15	-13	54	-7	8	100	36	47	-3	43	10	35
MOE46	45	59	42	23	55	11	25	45	37	35	41	51	40	17	26	36	100	49	37	31	33	15
MOE47	46	16	58	-10	5	64	26	22	34	67	9	5	58	3	1	47	49	100	16	55	20	45
MOE48	47	62	8	15	65	8	51	46	47	18	11	64	15	9	52	-3	37	16	100	0	2	9
MOE49	48	16	52	7	5	30	24	12	6	42	36	2	46	17	3	43	31	55	0	100	32	47
MOE50	49	7	30	40	2	10	19	21	-9	25	52	19	23	34	-4	10	33	20	2	32	100	36
MOE51	50	4	49	23	13	57	37	12	19	47	0	10	46	-1	-4	35	15	45	9	47	36	100

The original coefficients were multiplied by 100 and rounded into integer numbers.

- 34 A structure was found in this SSA in dimensionality 2, as shown in figure 1. There is a two-fold structure, corresponding to the two facets of the mapping sentence. One is a polar structure, which means contiguous regions emanate from a central point. This structure has been found in many analyses of data dealing with attitudes especially relating to life areas (Cohen 2000; Levy and Guttman 1975, among many others). In a polar structure, each region has its own logic, not dependent upon or proceeding from any of the others (as would be seen in a concentric or consecutive structure). Each of the three polar regions in this map contains all and only the items related to one of the MoE. The second structure is modular, including two concentric circles. The small circle encompasses the “general” items, while the large circle includes the “specific” ones. This kind of structure regarding a “general / specific” facet, has been repeatedly found in previous surveys (Cohen 1995, Levy 1991, among many others).

Figure 1: A Geometric Representation (SSA) of the Inter-Correlations between the 50 Various Items (Dimensionality 2)



Key

Doing mode (upper left hand region)

- MOE2: A person must be evaluated according to what he does.
 MOE4. There is no greater enjoyment than doing.
 MOE7. A day without doing is a lost day.
 MOE10. Good social activity is characterized by taking initiative to organize social encounters.
 MOE14. It is not Studying, but Doing, which is crucial.
 MOE18. A good school prefers active doing to traditional frontal teaching.
 MOE20. I am active means I live.
 MOE24. A person's uniqueness is measured according to his deeds.
 MOE29. Profit is not important; the main thing is to be a partner in doing.
 MOE31. Education must be directed towards doing.
 MOE34. A satisfying life is a life in which the person acts and does.
 MOE36. Instead of examining the student's knowledge, his deeds should be considered.
 MOE37. Significant learning is active learning.
 MOE38. Every moment without doing is a wasted one.
 MOE41. The very fact of doing heals the soul.
 MOE44. It is important to volunteer, especially for tasks that involve real activity.
 MOE46. A good political regime is one that gets things done.
 MOE48. The person whose deeds exceed his wisdom, the wisdom will prevail.

Having mode (right hand region)

- MOE3. A good teacher is the one who controls his class.
 MOE6. The main objective in life is to make money.
 MOE8. A good learner is the one who accumulates knowledge.
 MOE12. Children should be educated to continue to accumulate assets in addition to what they received from their teachers.
 MOE16. Love is a feeling that you possess something.
 MOE19. The main aim of every political regime is to attain economic achievements.
 MOE23. A successful person is one who has a fancy house, a luxury car, etc.
 MOE26. It is preferable to have a prestigious hobby, which offers possibilities to accumulate and possess valuable things.
 MOE28. Reading books is important when it leads to the acquisition of knowledge.
 MOE32. In the choosing a profession or an occupation, maximum preference has to be given to the extent of income and profit that can be derived from it.
 MOE35. Learning without material reward is not learning, but rather a waste of time.
 MOE39. A person's success is measured according to what he has.
 MOE42. It is important for a person to have documents attesting to his achievements.
 MOE45. The main aim of studying at school is to get a matriculation certificate.
 MOE47. Invest every penny you earn so as to make additional profits.
 MOE49. A person feels secure when he has a great deal of property and a large income.
 MOE51. Happiness of a person is contingent upon his ability to acquire what he desires.

Being mode (lower left hand region)

- MOE1. Freedom to express opinions is a very important value.
 MOE5. It is most important for a person to renew himself in those areas in which he is active.
 MOE9. It is important for every person to attain full self-realization.
 MOE11. The quality of a school is measured according to the extent of its contribution to the development of unique talents.
 MOE13. The essence of a person is manifested by the ability to express himself.
 MOE15. Meaningful learning is that which affects the learner and causes him to change.
 MOE17. I think means I am.
 MOE21. Self-criticism is necessary for good teaching.
 MOE25. Education cannot be called as such, without education for values.
 MOE27. A good learner is the one who develops himself by the acquired knowledge.
 MOE30. Self-realization is the supreme goal of life.
 MOE33. Inner authority is true authority.
 MOE40. It is important that the political regime should permit the individual to express his views.
 MOE43. Reading books is an important component in a person's development.
 MOE50. It is preferable to choose an occupation that enables one's wishes to come true

- 35 **Each of these regions contains one item which is closest to the center and which can be said to epitomize the region. The three items in the center of the map themselves form a contiguous region of the "general" items. The other 47 items form another region, the "specific" items. These two regions correspond to facet A of the mapping sentence. Their structure is modular. The modular structure is often found representing groups of items**

which are contingent upon one another, such as the general and the specific (Levy, Levinsohn & Katz 1993; Cohen 1995).

- 36 The region in the upper-left area of the map contains all of the items related to the *Doing* MoE. “A good political regime is one that gets things done” is the item in the central general region of the map. In a region encompassing most of the right-hand side of the map, we find all of the items related to the *Having* MoE. “The main aim of every political regime is to attain economic achievements” is the general item. The lower-left region contains the items related to the *Being* MoE. “The essence of a person is manifested by the ability to express himself” is the general item.
- 37 The three items in the center of the map constitute a region themselves, the items related to the “general” character of each MoE, as shown in facet A of the mapping sentence. The other 47 items, arranged around this central region, extending out to the periphery of the map, are items related to the “specific” character of their respective MoE. It is interesting to note that for both the *Doing* and *Having* regions, the items in the “general” region are concerned with the definition of the political regime, while in the *Being* region the general item is concerned with the individual’s true essence. The item concerning the political regime in the *Being* region (#40) is specific and located at the periphery of the map. This result, in itself, reflects the nature of each mode. The *Being* mode (and the individuals for whom this mode is dominant) is primarily concerned with the essence of the individual, while the *Doing* and *Having* modes (and individuals for whom they are dominant) are concerned with the structure of society and the polity.
- 38 The regions are very clearly delineated, with no “misplaced” items (i.e. items appearing in a region other than the one which would be expected, given the theoretical basis of the study). Both of the facets in the mapping sentence can be recognized in the SSA.

The Scale Reduction

- 39 The scale presented above included originally some 51 items. One of these items (item # 22: “He that increases knowledge increases sorrow”) had to be abandoned as it did not fit any expectation (in factor analysis or in facet analysis). In fact, this sentence, originating from a very old traditional idiom, was not understood by many of the interviewees. The remaining 50 items are still too many for a convenient scale. The following section describes the process used to further reduce their number in order to make the scale useful for other researchers so that it may be included as a specific part in larger research projects.
- 40 Using factor analysis and facet analysis, we discovered findings similar to those of the three Modes of Existence. This strengthens the validity of the questionnaire as a check of the three Modes of Existence. Moreover, the findings have shown that not all the items contribute to the mode in the same way, and there are items that can be taken out for the purposes of shortening the questionnaire. Also, many different research studies (for instance, Cohen 2002) have found that it is possible to obtain similar structural results from short questionnaires that are based on long questionnaires. Most of the items we recommend excluding for the purpose of shortening the questionnaire were found in both methods of examination.
- 41 On the basis of the Factor Analysis, we excluded items with Loading Coefficient <.5. In this way, 14 items were removed from the scale. The items suggested for exclusion on the

basis of the Factor Analysis were: from the *Doing* MoE, items 7, 18, 36, 37, and 46; from the *Having* MoE, items 3, 8, 16, 28, and 45; and from the *Being* MoE, items 11, 13, 15, and 27.

- 42 A verification and subsequent reduction was done based on the results of the SSA. As we said already, there are two partitioning rules of the map: polar and modular. In reducing the number of the items, it is necessary to maintain the various regions. Therefore, the three items at the center of the map (MoE13, MoE19, MoE46) located in the inner circle, have to be maintained. Therefore, despite the fact that items 13 and 46 had loading coefficients of less than .5 in the factor analysis, they were retained based on their positions in the center of the SSA map. It may be noted in Table 1 that item 13 loaded on two factors, *Having* and *Being*, further illustrating its unique and important role in the structure.
- 43 Furthermore, for each of the polar regions, we chose to maintain items which correspond to the following criteria: a) they likely cover different parts of the relevant regions; b) the variables with middle or low coefficient of alienation are preferred - this coefficient indicated the degree of success in translating the data appearing in the correlation matrix into the location in the map; the lower this coefficient, the better the translation.
- 44 This is the final list of the 17 chosen items. The mode of existence to which each belongs is written in parentheses at the end of the line:
- MoE 5: It is most important for a person to be renewed through participation in various areas of activity. (Being)
- MoE 6: The main objective in life is to make money. (Having)
- MoE 9: It is important for every person to attain full self-realization. (Being)
- MoE 13: The essence of a person is manifested by the ability to express himself. (Being)
- MoE 19: The main aim of every political regime is to attain economic achievements. (Having)
- MoE 21: Self-criticism is necessary for good teaching. (Being)
- MoE 25: Education cannot be called as such, without education for values. (Being)
- MoE 26: A prestigious hobby, which offers possibilities to accumulate and possess valuable things, is preferable. (Having)
- MoE 29: Profit is not important; the main thing is to be a partner in doing. (Doing)
- MoE 31: Education must be directed towards doing. (Doing)
- MoE 32: In choosing a profession or an occupation, maximum preference has to be given to the income and profit that can be derived from it. (Having)
- MoE 35: Learning without material reward is not learning, but rather a waste of time. (Having)
- MoE 43: Reading books is an important component in a person's development. (Being)
- MoE 44: It is important to volunteer, especially for tasks that involve real activity. (Doing)
- MoE 46: A good political regime is one that gets things done. (Doing)
- MoE 48: The person whose deeds exceed his wisdom, the wisdom will prevail. (Doing)
- MoE 51: Happiness of a person is contingent upon his ability to acquire what he desires. (Having)

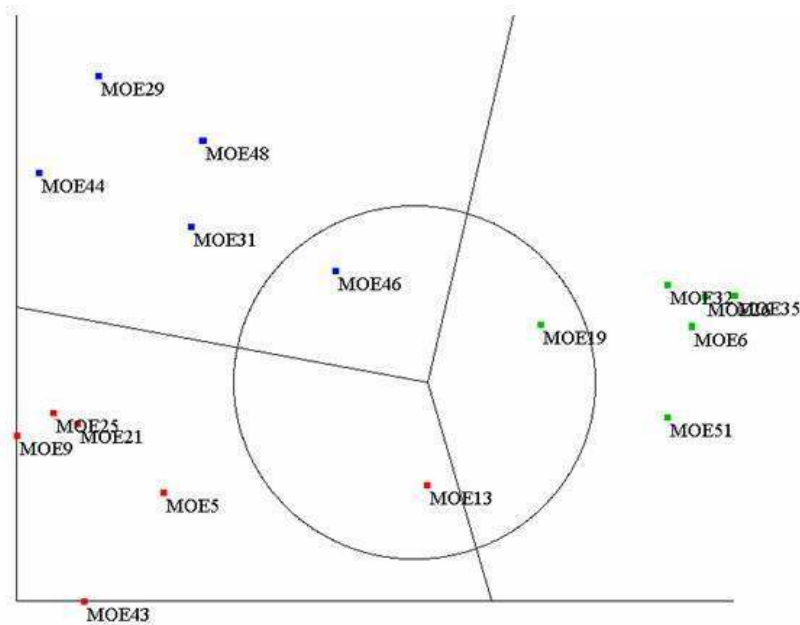
Verification of the Shortened Scale

- 45 After the items for the shortened scale were chosen, two complementary procedure were run for verification. First, the reliability for each of the Modes was checked, with the following results:

<i>Being</i>	.6884
<i>Having</i>	.6223
<i>Doing</i>	.6730

- 46 The reliability scores are not lower than for the entire list of items in each domain.
- 47 Secondly, the SSA was performed again using the shorter list of 17 items. The map is shown in Figure 2. It may be seen that the same structural results were found. It may be noted that in the second map the *Being* MoE is in the upper left hand region and the *Doing* MoE in the lower left hand. However, what is important in the SSA is the integrity of the regions and their relative positions, which were verified. The shifting of the positions does not alter the structure of the map. The same three items were located in the central region of the modular structure and the same items were located in each of the polar regions, thus confirming the structure.
- 48 On the basis of these two operations, it seems that the shorter list of 17 items indeed represents the whole scale of the initial 51 items.

Figure 2: A Geometric Representation (SSA) of the Inter-Correlations between the Various Final 17 Items (dimensionality 2)



Conclusion

- 49 The Mode of Existence concept addressed in this survey is relatively new. We assumed that the three modes exist and are intertwined simultaneously in the personality structure of the individual, but that their relative weight was not equal; that is, for each

individual, one mode would be dominant. The dominant MoE and the hierarchy of the various modes represent the pattern/trait of the individual. Attitudes, perceptions of the surrounding world and actual day-to-day behavior will be determined by the dominant mode of existence.

- 50 Using two independent methods, Factor Analysis and Facet Theory, we verified and then shortened Reichenberg's (1996) questionnaire pertaining to Modes of Existence. In this case, the Modes of Existence were related to the learning process. Given the universal applicability of the Modes of Existence, future studies could utilize and further verify the shortened scale for other populations and life areas. For example, studies of teacher stress (Wiley 2000) and job burnout cited a definition of stress as constraints on "being, having and or doing" what individuals desire (McGrath 1976). Differentiating between these modes of existence, as outlined in this scale, may lead to more precise understanding of stress and burnout due to restrictions on an individual's dominant mode of existence. As students' and teachers' dominant modes of existence impact their educational motives (self-enhancement, future earning potential, practical skills, etc.), this scale may be helpful in educational evaluations, particularly in comparisons of the dominant mode of existence held by various sub-populations such as teachers and students, or religious and ethnic groups. Given that the current study population included only women, a verification of the scale among male respondents would lend strength to the results.
- 51 An additional route for future investigation would be to include a fourth mode of existence, "interacting", which has been added to the other three (Max-Neef *et al.* 1989; Max-Neef 1991). Max-Neef applies these four modes to each of nine fundamental human needs (i.e. security, identity...). Interacting, as a mode of existence, refers to the settings in which the needs are met or not met. As Max-Neef's use of the terms "being, doing and having" differs slightly from their use in the Fromm and Rand models, the compatibility of this mode, with the scale and SSA structure presented in this article in the educational field, would need to be investigated. The addition of this fourth mode could potentially expand and enrich the scale.

BIBLIOGRAPHY

- Amar, R. & Toledano, S. (2002). *HUDAP - Hebrew University Data Analysis Package*. Jerusalem: Computation Center of the Hebrew University and the Louis Guttman Israel Institute of Applied Social Research.
- Ben-Sira, Z. & Guttman, L. (1971). *A Facet Theoretical Approach to Research on the Use of Media and on Attitudes among Elite Groups*. Jerusalem: Israel Institute of Applied Social Research.
- Borg, I. (Ed.). (1981). *Multidimensional Data Representations: When and Why*. Ann Arbor, MI: Mathesis Press.
- Canter, D. (ed.). (1985). *Facet Theory: Approaches to Social Sciences*. New York, NY: Springer-Verlag.

- Cohen, E.H. (1995). "Toward a strategy of excellence: A systemic analysis and policy research based on external variables in SSA." In: Hox, J.J., Mellenbergh, G.J. & Swanborn, P.G. (eds.). *Facet Theory Analysis and Design*. Amsterdam: University of Amsterdam, pp. 55-62.
- Cohen, E.H. (2000). "A Facet Theory approach to examining overall and life facet satisfaction relationships", *Social Indicators Research*, 51, 223-237.
- Cohen, E.H. (2004). "Images of Israel: A structural comparison along gender, ethnic, denominational and national lines", *Tourist Studies* 3, 253-280.
- Cohen, E.H. (2002). *Les Juifs de France: Valeurs et identité*, FSJU, Paris.
- Cohen, E.H. (2003). "Tourism and religion. A case study: Visiting students in Israel", *Journal of Travel Research*, 42 (1), 36-47.
- Cohen, E.H., Clifton, R.A. & Roberts, L.W. (2001). "The cognitive domain of the quality of life of university students: A re-analysis of an instrument", *Social Indicators Research*, 53, 63-77.
- Dittmar, H. (1992). *The Social Psychology of Material Possessions*. New York: Harvester and Wheatsheaf, St. Martins Press.
- Ewen, R.B. (1998). *Personality: A Topical Approach*. Mahwah, NJ: Erlbaum.
- Fromm, E. (1976). *To Have or To Be?* London: Cox & Wyman.
- Gratch, H. (ed.). (1973). *Twenty-Five Years of Social Research in Israel*. Jerusalem: Jerusalem Academic Press.
- Guttman, L. (1959). "Introduction to facet design and analysis". In: *Proceedings of the Fifteen International Congress of Psychology*. Brussels, Amsterdam; North-Holland Publishing Company, pp. 130-132.
- Guttman, L. (1965). "A faceted definition of intelligence." In: Eiferman, R. (ed.) *Studies in Psychology* (Scripta Hierosolymitana) 14. Jerusalem: Magnes Press, pp. 166-181.
- Guttman, L. (1968). "A general nonmetric technique for finding the smallest co-ordinate space for a configuration of points", *Psychometrika* 33, 469-506.
- Guttman, L. (1981). "What is not what in theory construction". In: Levy, S. (ed.) *Louis Guttman on Theory and Methodology*. Brookfield, Vermont: Dartmouth Publishing Company Ltd, pp. 3-21.
- Guttman, L. (1982). "Facet theory, smallest space analysis and factor analysis", *Perceptual and Motor Skills*, 54, 491-493.
- Guttman, L. (1986). "Coefficients of polytonicity and monotonicity". In: *Encyclopedia of Statistical Sciences* (Vol. 7). New York: John Wiley and Sons, pp. 80-87.
- Levy, S. (1976). "Use of the mapping sentence for coordinating theory and research: A cross-cultural example", *Quality and Quantity*, 10, 117-125
- Levy, S. (1985). "Lawful roles of facets in social theories". In: Canter, D. (ed.). *Facet Theory Approaches to Social Research*. New York: Springer-Verlag, pp. 59-96.
- Levy, S. (1991). "What is a good school in the eyes of high school students?" *Megamot* 33, 535-548 (Hebrew, English abstract).
- Levy, S. (ed.) (1994). *Louis Guttman on Theory and Methodology: Selected Writings*. Dartmouth: Aldershot.
- Levy, S. & Guttman, L. (1975). "On the multivariate structure of well-being", *Social Indicators Research*, 2, 361-388.

Levy, S., Levinsohn, H. & Katz, E. (1993). *Beliefs, Observances and Social Interaction among Israeli Jews*. Jerusalem: The Louis Guttman Israel Institute of Applied Social Research.

Maraun, M.D. (1997). "Appearance and reality: Is the Big Five the structure of trait descriptors?" *Personality and Individual Differences*, 22, 629-647.

Max-Neef, M. et al. (1989). "Human scale development", *Development Dialogue* 1, 7-80.

Max-Neef, M. (1991). *Human Scale Development: Conceptions, Applications and Further Development*. New York: The Apex Press.

McGrath, J. E. (1976). "Stress and behavior in organizations". In: Dunnett, M.D. (ed.), *Handbook of Industrial and Organizational Psychology*. Chicago: Rand-McNally, pp. 1341-1396.

Rand, Y. (1993). "Modes of Existence (MoE): To be, to have, to do- Cognitive and motivational aspects", paper presented at the International Association for Cognitive Education. Israel: Nof Ginosar.

Rand, Y & Tannenbaum, A.J. (1998). *To Be, to Have, to Do: An Integration and Expansion of Existing Concepts*. Jerusalem, Israel: C.E.L.P.

Reichenberg, R. (1996). *Student-Cooperating Teacher Interaction within the Framework of Practical Teaching Experience and its Interaction to MoE Attitudes Towards Education and Reflective Teaching*. PhD Thesis, Bar-Ilan University, Israel.

Rokeach, M. (1973). *The Nature of Human Values*. New York, NY: Free Press.

Rokeach, M. (1976). *Beliefs, Attitudes and Values*. San Francisco, CA: Jossey-Bass.

Sagee, R. (1999). *Coping Resources of the Educational Counselors: MoE and Sense of Coherence as Basic Determinants of Burnout, Satisfaction and Commitment*. PhD Thesis, Bar-Ilan University.

Schuler, R. (1980). "Definition and conceptualization of stress in organisations", *Organization Behaviour and Human Performance*, 25, 184-215.

Schwartz, S. (1999). "A theory of cultural values and some implications for work", *Applied Psychology: An International Review* 48, 23-47.

Schwartz, S. & Bilsky, W. (1987). "Toward a universal psychological structure of human values", *Journal of Personality and Social Psychology*, 53, 3, 550-562.

Schwartz, S. & Bilsky, W. (1990). "Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications", *Journal of Personality and Social Psychology*, 58, 878-891.

Schwartz, S. H. & Sagiv, L. (1995). "Identifying culture-specifics in the content and structure of values". *Journal of Cross-Cultural Psychology*, 26, 92-116.

Shye, S. (1978). "On the search for laws in the behavioral sciences". In: Shye, S. (ed). *Theory Construction and Data Analysis in the Behavioral Sciences*. San Francisco: Jossey-Bass Publishers, 2-24.

Wiley, C. (2000). "A synthesis of research on the causes, effects and reduction strategies of teacher stress". *Journal of Instructional Psychology*, 27, 80.

NOTES

1. Readers should be aware that the non-linear MONCO correlations are always higher than the more traditional, linear, Pearson correlations. This is because MONCO measures whether or not

two items increase or decrease in the same direction. It is more sensitive (though less useful as a predictor), and recognizes a wider variety of correlations as “perfect”.

ABSTRACTS

Following Fromm's (1976) and Rand's (1993) theory, a scale of 51 items on attitudes towards the Being, Doing and Having "Modes of Existence" has been constructed (Reichenberg 1996). Our objectives are two-fold: first, an examination, in parallel, of the validity of the scale with two methods: Factor Analysis and Facet Theory. And second, a shortening of the scale from 51 questions to a more compact one. The present article is based on empirical data gathered from 386 female teachers, students and counselors in college education departments in Israel in 1995 and 1997.

Des modes d'existence Etre, Avoir et Faire : Confirmation et réduction d'une nouvelle échelle basée sur une étude d'enseignants, stagiaires-enseignants et conseillères israéliennes : Suivant les théories de Fromm (1976) et de Rand (1993), une échelle de 51 items d'attitudes envers les « modes d'existence » Etre, Avoir et Faire a été construite par Reichenberg (1996). Ici, nous avons deux objectifs : examiner la validité de cette échelle avec deux méthodes d'analyse en parallèle -- par l'analyse factorielle et par la théorie des facettes -- et raccourcir l'échelle de 51 items. Cet article est basé sur des données empiriques concernant 386 enseignants, stagiaires-enseignants et conseillères israéliennes d'un département d'éducation dans une université en Israël en 1995 et 1997.

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Mots-clés: Analyse factorielle, Modes d'existence, Théorie des facettes

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