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The Impact of Work Setting Congruence on Well-Being

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This study investigates the influence of two aspects of person-environment congruence on well-being: occupational congruence (OC), the subject of numerous studies, and an entirely new concept, congruence with the physical conditions of the workplace (work setting congruence) (WSC). Using a sample of 164 men and women employed in seven of Roe's eight occupational fields, significant correlations, all in the expected direction, were found between WSC and well-being measures (i.e., satisfaction, burnout, and anxiety), as posited. These were then compared to the correlations between OC and the same well-being measures. The results indicate that WSC is a distinct concept with a unique and significant contribution to well-being. Furthermore, evidence of an additive effect was found so that the presence of both WSC and OC produced higher well-being values than the presence of only one of the congruences.

Keywords: work setting, work conditions, congruence, Holland's theory, occupational congruence, satisfaction, anxiety, somatic complaints, burnout

The starting point for this study was Meir's (1989) mapping sentence: congruence → well-being. What this means is that all of the various types of congruence (e.g., occupational, vocational, skill utilization, etc.) are positively related to the positive measures of well-being (satisfaction, self-esteem, etc.) and negatively related to its negative measures (anxiety, burnout, etc.).

The hundreds of studies that have tested Holland's (1985, 1997) congruence theory are reviewed in Spokane (1985), Holland and Gottfredson (1990), and Spokane, Meir, and Catalano (2000) and were subjected to meta-analysis by Assouline and Meir (1987) and Tranberg, Slane, and Ekerberg (1993). The results consistently confirm the existence of a connection in the expected direction between the various types of congruence and well-being variables, with the average correlation being .21. Among the types of congruence examined are occupational congruence, leisure congruence, within-occupation congruence,

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skill utilization congruence, and environmental congruence. A number of studies have also reported an additive effect whereby the more types of congruence that exist, the greater the individual's sense of well-being. This effect was found for example in the investigation of Melamed, Meir, and Samson (1995), which was chosen as a benchmark study in the review by Spokane et al. (2000). On the other hand, quite a few studies have found the correlation between congruence and well-being to be so low as to call the entire congruence theory into question.

The notion of congruence is essentially a simple one: If a person gets what he or she wants, we can expect this correspondence to be expressed in higher values of positive measures such as satisfaction, persistence, and success and lower values of negative measures such as burnout, anxiety, and somatic complaints.

Most of the studies on congruence have employed the independent variable of occupational interests. The conventional hypothesis holds that when an individual displays a preference for a certain category of occupations (e.g., technology in Roe's [1956] typology or realistic in Holland's [1985] system), then the aforementioned results will be obtained if he or she does in fact work in one of those occupations.

In an attempt to expand our understanding of the factors that influence a worker's well-being, the current study examined a new variable we term *work setting congruence* (WSC). Although often included under *working conditions*, it refers to a specific aspect of these conditions. Rather than relating to issues such as higher salary, fewer working hours, longer vacations, better insurance or pension plans, and so forth, which every employee would be more than happy to receive, WSC refers to working conditions for which different employees have different preferences. For example, some people prefer to work in an intimate setting, such as an office or laboratory that they do not need to share with other workers and where they cannot be observed, whereas others are indifferent to the presence of others or even prefer to be seen working. Similarly, some people enjoy an esthetic environment, whereas for others the need to maintain the appearance of their workspace is an unwanted burden or they may be oblivious to this aspect of their job. The variables dealt with in this study are thus working conditions that relate to the physical environment in which an employee functions, or as we have chosen to call it, the work setting.

Two hypotheses were formulated for the purposes of this study. Hypothesis 1 states that the more an employee's preferences in respect to the physical environment are met, the greater the well-being he or she will report. In other words, the higher the work setting congruence, the higher the well-being. This will be expressed in higher values on positive well-being measures, such as satisfaction, and lower values on negative well-being measures, such as anxiety and burnout.

The influence of WSC might also be reflected empirically in an additive effect. Thus, Hypothesis 2 predicts that the presence of both WSC and occupational congruence (OC) will yield higher well-being values than the presence of only one of these two congruences, and the presence of one will yield higher well-being than the absence of both.

Table 1
Participants by Occupational Field (Roe, 1956)

	Field							Total
	Business	Organizational	General Culture	Service	Arts and Entertainment	Science	Technical	
N	19	33	23	32	6	18	33	164
%	11.6	20.1	14.01	19.5	3.7	11.0	20.1	100

METHOD

Participants

The study was conducted on 164 workers in Israel, who were asked to assist in a study by completing a set of anonymous questionnaires. (The purpose of the study was explained after completion of the questionnaires to those participants who expressed an interest.) The participants were chosen deliberately to represent the following seven occupational fields in Roe's (1956) typology: business, organization, general cultural, service, arts and entertainment, science, and technology. None representing the eighth field of outdoor were selected as the issue of physical environment is irrelevant to them. The distribution of the participants by occupational field appears in Table 1.

According to the information gleaned from the biographical questionnaires, 60% of the respondents were female, 60% were married, mean age was 39.1 ($SD = 12.2$), mean level of education was 15.6 years ($SD = 2.2$), and mean years of experience in the occupation was 11.6 ($SD = 10.7$). A total of 240 questionnaires were administered. Of these, 19% were not returned, and another 16% were excluded from the analysis as they indicated extreme environmental congruence (see "Procedure").

Instruments

In addition to an anonymous questionnaire tapping basic biographical data, the participants were asked to complete three inventories aimed at measuring level of congruence (one of which had two parts), seven examining degree of well-being, and a final questionnaire testing perceived environmental congruence.

Work Setting Congruence I

Preferred work setting. The respondent's preferences were assessed by means of 18 items relating to the physical conditions of the workplace: congestion, privacy, temperature, lighting, size of workspace, cleanliness, esthetics, number of other workers in the environment, windows, noise, ventilation, facilities (e.g., showers), story, mobility, change of workmates, wall color, partitions, and color uniformity. This list is based on a study by Yogev and Druckman (1982) on the characteristics of the workplace. After a process of brainstorming by the research team, the 18 characteristics that appeared most relevant were chosen for the purposes of the current study and converted into items on the questionnaire. For each item, a scale of five alternatives was presented in ascending or descending order. For example:

- very brightly lit environment
- brightly lit environment
- well-lit environment
- low-lit environment
- dark environment

- very small space
- small space
- moderate-sized space
- large space
- very large space

- no one else in the workspace (alone)
- one or two other people in the workspace
- three or four other people in the workspace
- five or six other people in the workspace
- seven or more other people in the workspace

The participants were asked to relate to each alternative in each item, indicating their preferences by marking ✓ next to the setting in which they would most like to work, X next to other settings in which they would be willing to work, and NO next to any settings in which they would be totally unwilling to work.

Actual work setting. This questionnaire contained the same 18 items as the preferred work setting instrument. Here the respondents were asked to mark the one alternative that best described the actual environment in which they worked.

The results of these two instruments were combined using the comparative method (see "Procedure"). Equivalent test reliability (with Work Setting Congruence II) was .74.

Work Setting Congruence II

This instrument consisted of a single question: "To what degree do the physical conditions of your workspace match your personal preferences?" The participants were asked to indicate their response on a scale of 1 to 20, with verbal explanations appearing above the scores: *very little* above 1 through 5, *to a certain extent* above 6 through 10, *to a large extent* above 11 through 15, and *very much* above 16 through 20. Equivalent test reliability (with Work Setting Congruence I) was .74.

Satisfaction With the Work Setting

This dimension was measured by means of a single question: "How satisfied are you with the physical conditions of your workspace?" The participants were asked to indicate their response on a scale of 1 to 20 identical to that used for the Work Setting Congruence II questionnaire. Equivalent test reliability (with Work Satisfaction, Questionnaire No. 5) was .71. This is the minimum acceptable reliability for this test.

Perceived Environmental Congruence

This instrument consisted of two items: "How satisfied are you with the people with whom you work?" and "How similar are your occupational interests to those of the other people in your work environment?" Responses were indicated on a scale of 1 to 20 identical to that used for the Work Setting Congruence II questionnaire. This questionnaire was included to screen out respondents who displayed extreme environmental congruence (see "Procedure"), which was not employed as a variable in this study.

Work Satisfaction

A single question was posed: "When you consider all aspects of your job, how satisfied are you with it?" The respondents indicated their answers on a 9-rank scale (as used in Barak & Meir, 1974), in which verbal explanations appeared for each of the odd numbers: 1 = *I am always dissatisfied*, 3 = *on the whole, I am dissatisfied*, 5 = *I am moderately satisfied*, 7 = *on the whole I am satisfied*, and 9 = *I am always satisfied*. The even numbers were marked as "intervening ranks." Equivalent test reliability (with Satisfaction With the Work Setting, Questionnaire No. 3) was .71. This is the minimum acceptable reliability for this test.

Anxiety

The participants completed the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) consisting of 20 items. They were asked to indicate on a 4-rank scale the degree to which they feel tense, worried, and so on during work. Cronbach α reliability was .89 (Meir, Melamed, & Dinur, 1995).

Self-Esteem

Participants responded to the four items on the Govoli and Melamed (1984) Self-Esteem Inventory. For each item, they were asked to indicate on a 7-rank scale the degree to which they are successful, believe in themselves, are pleased with themselves, or function at the level they wish to. Cronbach α reliability was .92 (Meir, Melamed, & Dinur, 1995).

Burnout

Participants completed the Pines, Aronson, and Kafry (1981) Burnout Inventory consisting of 20 items. They were asked to indicate on a 7-rank scale the frequency with which they experienced symptoms of burnout, such as fatigue, unhappiness, and hopelessness. Cronbach α reliability was .91 (Meir, Melamed, & Dinur, 1995).

Somatic Complaints

Respondents completed the Caplan, Cobb, French, Van Harrison, and Pinneau (1975) inventory consisting of 10 items. They were asked to indicate on a 3-rank scale whether or not during the past month they had suffered from a variety of complaints at work, such as headaches, loss of appetite, and so on. Cronbach α reliability was .79 (Meir, Melamed & Dinur, 1995).

Occupational Satisfaction

Participants responded to the Satisfaction Inventory devised by Meir and Yaari (1988) consisting of 10 questions, each to be answered on a scale of 1 to 20 (similar to the format of the Work Setting Congruence II questionnaire). Split-half reliability was .91 (Meir & Yaari, 1988).

Occupational Interests—Ramak

This dimension was measured by means of the Ramak Occupational Interests Inventory (Version J-4), which contains a list of 72 occupations, 9 for each of the

fields in Roe's (1956) typology. Respondents are asked to mark their degree of interest in each of them on a scale of *yes*, ? (doubtful), and *no*. Split-half reliability was .76 (Shefi, 1978).

Due to the large number of questionnaires and in an attempt to discover any possible effect of the order of administration, 83 (50.6%) of the participants received the instruments in the aforementioned order, and the others received them in nearly reverse order, as described in Lachterman (1999) and Meir and Lachterman (2000). A comparison of the means of the well-being variables revealed no significant difference for order of presentation.

PROCEDURE

For each of the variables, the score for each participant was the total of his or her scores on the relevant instrument. Two different methods were employed for assigning scores on the more complex variables: work setting congruence and occupational congruence.

Work Setting Congruence

The first method employed here was comparative, and the second was based on the direct question. The comparative method was used for those instruments on which the respondents were asked to place a ? next to the alternative they most preferred and an X next to those they were willing to accept. If the same category was marked with a ? on both the Preferred Work Setting and the Actual Work Setting questionnaires, a score of 2 was assigned; if an X appeared on the Preferred Work Setting questionnaire beside the category describing the actual setting, a score of 1 was assigned; and if the actual setting was one that received a no on the preferences questionnaire, that is, the respondent was unwilling to work in such a setting, a score of 0 was assigned. Thus, the first WSC score for each respondent was the total of his or her scores derived from the comparison of all items (WSC I). The second method for assigning WSC scores was used for the Work Setting Congruence II questionnaire to which the participants responded on a scale of 1 to 20 and consisted of their score on the single direct question in this instrument (WSC II). The correlation between the two WSC scores was .74, which is the cut-off point indicating equivalent test reliability.

Occupational Congruence

Several levels of congruence were defined to represent the distance between the respondent's first field of interest as revealed by the Ramak inventory and his or her actual occupation according to Roe's (1956) typology. Occupational field

was determined by two occupational psychologists. In case of disagreement (5 cases, 3%), a third judge made the determination. Congruence scores were then assigned by two methods: a circular model and a hierarchical model (following Gati, 1979). In the circular model (business – organization – general cultural – service – arts and entertainment – outdoor – science – technology – business . . .), a score of 5 is assigned if the respondent's dominant field (i.e., the field on which he or she received the highest mark on the Ramak inventory) is identical to the field of his or her actual job as indicated by the biographical data (i.e., high level of congruence), 4 if the fields are adjacent, and so on down to 1 if the fields are farthest from each other in the model. In the hierarchical model, the congruence score is assigned according to the number of divisions in the mapping of Roe's eight occupational fields. Here the fields are arranged in the following manner. The first division contains three trunks: technology, outdoor, and science; arts and entertainment; and service, general cultural, business, and organization. In the second division, the trunks are split into separate branches: the first into its three branches, the second remains as is, and the third into two branches: service and general cultural and business and organization. In the third division, service is separated from general cultural and business from organization. The congruence score represents the number of divisions between the respondent's dominant field as revealed by the Ramak inventory and the field of his or her actual job as determined by the judges. Accordingly, the scores range between a high of 4 and a low of 1. In the case of a tie in the dominant field (the highest score is given to two or more fields), the mean of the scores yielded by a calculation of each of these fields is employed. Further details and examples of this method can be found in Lachterman (1999) and in Meir and Lachterman (2000).

As this study deals with both work setting congruence and occupational congruence, there was a certain risk of "interference" from the variable of environmental congruence, that is, the degree of correspondence between the individual's personality type and that of the others in the work environment. Numerous studies have found environmental congruence to have a strong influence on satisfaction, supervisor evaluations, and other measures (e.g., Assouline & Meir, 1987; Meir, Hadas, & Noyfeld, 1997; Meir & Hasson, 1982). To examine the effects of WSC and OC without the intervention of environmental congruence, it was decided not to include those participants who displayed extreme environmental congruence (whether high or low). Accordingly, participants who scored in the upper or lower eighth on the Perceived Environmental Congruence questionnaire (as described earlier) were excluded from the analysis.

RESULTS

The correlations between the study variables are presented in Table 1. As expected, the correlations between parallel measures are high: .81 between occupational congruence as assessed by the circular model and by the hierarchical

model and .74 between the two measures of WSC. These are marked as significant not because there was any expectation that they might be negative or insignificant but to indicate that they are not meaningless. The correlations between the two measures of WSC on the one hand and the two measures of OC on the other are considerably lower than the correlations within each pair, ranging from .26 to .34. This is a clear indication that work setting congruence, which is examined here for the first time, is not the same as occupational congruence, which has already been the subject of numerous investigations.

The correlations between the three measures of satisfaction—job, occupational, and work setting—range from .61 to .77. In view of the fact that satisfaction is not stable (i.e., it is affected by shifts in factors that are liable to change even during the course of a single work day), these figures demonstrate both reliability and a certain “ceiling” that exists for this variable in general (See Table 2).

As expected, the three negative well-being variables employed here—burnout, somatic complaints, and anxiety—yielded positive intercorrelations of .59 to .64 and negative correlations with the positive measures of well-being—self-esteem and satisfaction—of $-.60$ to $-.71$. Self-esteem produced correlations of .63 to .73 with the three measures of satisfaction, as is to be expected in light of the positive nature of these variables. Thus, the seven measures of well-being yielded intercorrelations ranging from .52 to .77, all in the expected direction and all at a reasonable level for parallel measures of any kind (e.g., well-formulated IQ tests).

Hypothesis 1, predicting a connection between WSC and well-being, is confirmed by the findings. All the correlations between the measures of WSC and each of the well-being variables are significant (0.52 to 0.88), and all are in the expected direction. This is true even if we ignore the figure of 0.88 (degree of correspondence between work setting preferences and the actual work setting as compared with degree of satisfaction with the work setting), which might represent a spurious correlation. It is particularly interesting to note that WSC produced even higher correlations with the well-being variables than did OC. The difference between these two sets of correlations is significant, according to the Mann-Whitney test, for all four comparisons (in each comparison, ranking was performed for the correlations with WSC and with OC, each calculated by two different methods).

Confirmation was also found for Hypothesis 2, which predicted that the presence of both WSC and OC would produce higher well-being scores than the existence of only one of these correspondences and that one of these would produce higher well-being scores than if none were present. For purposes of the analysis, the respondents were divided into two groups: those above and those below the median congruence score. This was done separately for each of the two calculations of WSC and each of the two models of OC. Four MANOVAs were then performed (each of the 4 calculations of congruence on the well-being variables). The results of all these analyses were significant even at $.0001$; $.45 < U < .53$ ($df = 14, 310$).

Table 2
Correlations Between Congruence and Well-Being Measures ($n = 164$)

	WSC		OC		Satisfaction With				Self-Esteem	Burnout	Somatic Complaints	Anxiety
	I	II	Hierarchical Model	Circular Model	Job	Occupational	Work Setting					
WSC I	74*		30*	32*	63*	69*	72*	60*	-52*	-55*	-57*	
WSC II		26*	26*	34*	74*	66*	88*	64*	-53*	-61*	-55*	
OC: hierarchical model			81*	81*	35*	38*	19*	40*	-24*	-36*	-23*	
OC: circular model					43*	46*	29*	46*	-31*	-43*	-28*	
Job satisfaction						77*	71*	73*	-64*	-72*	-68*	
Occupational satisfaction							61*	68*	-60*	-65*	-62*	
Work setting satisfaction								63*	-52*	-55*	-53*	
Self-esteem									-60*	-71*	-65*	
Burnout										60*	64*	
Somatic complaints											59*	
Mean	21.72	11.84	2.25	3.34	6.11	125.11	11.70	21.76	60.30	4.15	39.63	
Standard deviation	7.97	4.94	1.12	1.28	1.67	48.63	5.24	4.84	30.22	3.93	14.45	

Note. WSC I = work setting congruence Hypothesis 1; WSC II = work setting congruence Hypothesis 2. OC = occupational congruence. The decimal point was omitted.

*All correlations are significant at the conservative $p < .05$ (and some even at .003).

In view of the significant findings regarding the additive hypothesis, a post hoc Scheffé test was conducted. Results revealed that (a) each of the 28 comparisons was significant for two congruences versus zero congruence, (b) each of the 28 comparisons was significant for one congruence versus zero congruence, and (c) 13 of the 28 comparisons were significant for two congruences versus one congruence, where 12 of the 15 nonsignificant findings related to the negative well-being variables. The support found for this hypothesis in each of the variance analyses and the large majority of post hoc analyses clearly demonstrates the existence of an additive effect of WSC and OC. In other words, work setting congruence makes a unique contribution to well-being beyond the contribution of occupational congruence, even after the effect of environmental congruence is factored out.

To achieve a more precise evaluation of the weight and relative contribution of WSC, the group displaying one type of congruence was divided into those evidencing WSC and those scoring high on OC. The findings indicate that the WSC respondents (in both calculations) are consistently higher on the well-being measures than the OC respondents (using both models). The four MANOVAs conducted on the means of these measures produced a significant difference between the WSC and the OC groups (for all measures $U < .49$, $p < .0001$). In view of these findings, a post hoc Scheffé test was conducted that confirmed these results, save for the combinations of self-esteem with OC by the circular model and WSC by the comparative method and occupational satisfaction with OC by the circular model and WSC by the direct question method. Furthermore, a contribution was found for each type of congruence from zero to one congruence, with WSC (as calculated by both methods) showing dominance. When this contribution was examined for the transition from one to two congruences, WSC was again dominant: For all measures, the addition of WSC to OC significantly raised the well-being scores. Thus, it is of benefit for employees displaying occupational congruence to enjoy work setting congruence as well, whereas on the whole, when WSC exists, there is little to be gained from the addition of OC, as it appears to have only a marginal and insignificant effect on well-being scores. Indeed, in certain cases, the addition of OC actually lowered well-being scores.

For a more comprehensive examination of the contribution of the two types of congruence to the explained variance of the well-being variables, a stepwise regression was performed using the two calculations of each of the congruences (for a total of four congruence dimensions) as the predicting variables and the seven well-being measures as the dependent variables. The results of this analysis appear in Table 3.

Table 3 clearly demonstrates the dominance of WSC (by both calculations) over OC (by both methods) for predicting well-being. For all variables, WSC entered the regression in the first step. Moreover, for three variables, it also entered the regression in the second step and for the other four in the third.

DISCUSSION

Both hypotheses formulated in this study were confirmed. All of the correlations were in the expected direction, and correlations of .52 to .88 (median = .62) were found for work setting congruence and the various measures of well-being, lending support to Hypothesis 1. The results also confirm Hypothesis 2 regarding an additive effect, that is, the more congruences, the greater the well-being.

The degree of WSC was assessed by means of two instruments that yielded an intercorrelation of .74 (as a measure of equivalent test reliability). As this is a relatively low figure, it is possible that the framing of instruments of higher reliability would produce even more convincing results. The data from the present study do not enable us to determine which of the two measures of WSC is more accurate, as the direct question method might not have yielded the same results had the participants not responded previously to the detailed 18-item questionnaire. Nonetheless, our findings reveal the viability of the concept of work setting congruence, making it a subject deserving of further investigation. Such studies will also have to consider the best method for measuring this variable.

The correlations based on the circular model of occupational congruence are slightly higher than those based on the hierarchical model, as are the differences between the various levels of congruence used to examine the additive hypothesis. These discrepancies however do not reach the level of statistical significance. The results reported by Meir, Esformes, and Friedland (1994) reveal a similar trend, although there too it did not reach significance.

The strength of the correlations found here is liable to raise the suspicion that a connection of some kind existed between the variables, deriving from the method of measurement. Such an argument might be made for example in respect to the direct question regarding WSC on the one hand and satisfaction with the work setting on the other: A participant indicating that the work setting corresponds with his or her preferences would also indicate satisfaction with this setting. The comparative method by which these variables were assessed, however, renders this contention untenable. On one 18-item questionnaire, respondents were asked not only to mark their preferred condition (out of five possibilities) but also other conditions in which they were willing to work. On a parallel 18-item questionnaire, they were asked to indicate the actual physical conditions of their job. It is highly unlikely that the participants could have manipulated the differences between these two instruments so that they matched certain responses on say, the anxiety questionnaire, thereby deliberately causing a lack of WSC to indicate a high level of anxiety, and so on. Moreover, any responses based on faking or social desirability would have been expected to lower the correlations (this being the demonstrated effect of lies, faking, and low reliability) rather than raising them. In fact, the complexity of this study in terms of the large number of instruments was designed, among other things, to allow for an examination of reliability.

Table 3
Results of Stepwise Regression on Congruence Dimensions as Predictors of Well-Being Measures (*n* = 164)

Predicted Variable	Variable Entered by Step	<i>r</i> Correlation	Multiple Correlations	% of Explained Variance	Incremental Contribution	<i>F</i>
Job satisfaction	1. WSC II	.74	.74	55	55	191.21**
	2. OC: circular	.43	.76	58	3	13.97**
	3. WSC I	.63	.77	59	1	5.03
Occupational satisfaction	1. WSC I	.69	.69	47	47	148.96**
	2. OC: circular	.46	.73	53	6	21.27**
	3. WSC II	.66	.76	58	5	12.06**
Work setting satisfaction	1. WSC II	.88	.88	77	77	549.95**
	2. WSC I	.72	.89	79	2	9.04
Self-esteem	1. WSC II	.64	.64	41	41	109.84**
	2. OC: circular	.46	.69	48	7	19.99**
	3. WSC I	.60	.71	50	2	8.67*
Burnout	1. WSC II	-.53	.53	28	28	64.86*
	2. WSC I	-.52	.56	31	3	7.73
Somatic complaints	1. WSC II	-.61	.61	37	37	95.66**
	2. OC: circular	-.43	.65	42	5	16.14**
	3. WSC I	-.55	.67	45	3	4.20

Anxiety						
1. WSC I	-.57	.57	32	32	79.23**	
2. WSC II	-.55	.60	36	4	9.45*	

Note. WSC I = work setting congruence Hypothesis 1; WSC II = work setting congruence Hypothesis 2. OC = occupational congruence. A predictor variable entered the regression only if its incremental contribution to the explained variance was significant at the conservative $p < .05$ (actually even at .0001 and .005).

* $p < .005$. ** $p < .0001$.

The most surprising finding of this study is the strength of the correlations between WSC and well-being. The meta-analyses by Assouline and Meir (1987) and Tranberg et al. (1993) indicated that the mean correlation between occupational congruence and satisfaction is .21 and .20, respectively; between environmental congruence and satisfaction .29; and between within-occupational congruence and satisfaction .41 and .40 (Assouline & Meir, 1987; Meir & Yaari, 1988). From this single study, it would appear that the correlation between work setting congruence and satisfaction (as well as other well-being variables) is in the area of .60 (the seven correlations range from .52 to .77; median = .64). There is no obvious explanation for the fact that this study also found higher correlations for occupational congruence than previous investigations. One possibility that should be examined in future research is the effect of excluding from the sample those respondents who displayed extreme environmental congruence. These may be the same sort of participants who lowered the correlations in other studies as they were either lacking in OC but high on satisfaction because of environmental congruence or high on OC but low on satisfaction because of a lack of environmental congruence.

The participants in the sample came from seven of the eight fields in Roe's (1956) typology (excluding outdoor, which is irrelevant to WSC), making it a representative sample of the workforce. This is a unique feature of the present study as previous investigations have been conducted on employees in selected occupations. Moreover, the sample represented all levels of the occupations in the seven fields, and the respondents had been working in their occupations for an average of 11.6 years ($SD = 10.7$ years).

Employees with more years of experience have been found to yield very low correlations between occupational congruence and satisfaction (Meir, 1988; Young, Tokar, & Subich, 1998). One explanation for the difference between the findings of these studies and the present investigation might lie in the fact that after a number of years, satisfaction is affected less by congruence between occupational choice and occupational interests and more by other factors such as WSC, which function as positive reinforcements. It is thus feasible that new workers do not immediately expect the physical conditions of their job to be perfectly matched to their needs and therefore report satisfaction based on their level of OC alone. At a later stage, as they advance in the organization and acquire status and confidence, they feel it more legitimate to express low satisfaction or dissatisfaction and to be critical of the work setting in the expectation that it should now be more suited to their personal preferences. In other words, as years of experience increase, so too does the importance of the physical environment for the employee's sense of well-being. Conversely, as years of experience increase, OC becomes less important for well-being. This situation might result from two possible circumstances:

1. After several years in the same occupation, the same position, and often even in the same organization, an individual might become bored and be ready for a change. Thus, although his or her OC

remains stable, it is no longer a sufficient source of well-being and satisfaction.

2. Alternatively, the level of OC itself might decline. This could stem from promotion within the same occupation (e.g., a technician promoted to a managerial position; a storeroom clerk promoted to a job that requires working with the public) or from the adoption of new tools or technologies that alter the nature of the occupation (e.g., when a jewelry designer begins to work with computer graphics). Although the individual is still employed in the same occupation, his or her OC might now be lower, thereby also lowering his or her sense of well-being.

If the latter explanation is correct, then the present study is of particular significance: The solution for experienced workers seeking counseling because of dissatisfaction, burnout, and so on might lie in creating a work setting more suited to their preferences in terms of congestion, privacy, partitions, change of workmates, and so on.

The confirmation found for the second hypothesis regarding the cumulative effect of WSC and OC is in line with earlier findings on the accumulation of congruences and its effect on well-being. Similar results were reported by Kaplan (1992); Meir and Melamed (1986); Meir, Melamed, and Abu-Freha (1990); Meir, Melamed, and Dinur (1995); and Meir et al. (1995).

This study examined WSC on seven well-being variables. Four of these had a positive connotation—three types of satisfaction and self-esteem—and the other three had a negative connotation—burnout, somatic complaints, and anxiety. The two categories were distinct from each other on only one factor: The negative measures did not yield a significant difference between one and two congruences, whereas the positive measures did. In terms of their practical application, these results suggest that to prevent the emergence of undesirable symptoms, there should be at least one congruence, whether occupational or work setting. Where the two can be achieved, the individual's well-being can be expected to improve both because of a decrease in negative symptoms and because of an increase in positive ones.

Analysis of the participants who displayed a single congruence, either work setting or occupational, reveals an even more intriguing picture. Those exhibiting WSC (by both calculations) consistently produced higher well-being scores than those high on OC (by both models), and this difference was statistically significant. Although as stated earlier, the dominance of the relation between WSC and well-being found in this study might be explained in terms of years of experience, it also seems likely that this type of congruence is more palpable and readily apparent and therefore felt more strongly. Workers frequently complain that they would like to change the size or décor of their workspace or to be able to control the amount of light or noise or the number of other people in it and so on. These elements appear to have a considerable effect on the individual's sense of well-being at work. It is not inconceivable that after more than 10 years on the

job, people might prefer to change their employment in the same occupation or even transfer to an occupation for which they have less affinity to enjoy a physical environment more suited to their personalities.

Furnham and Schaeffer (1984) listed four possible ways of coping with a lack of congruence: (a) to change the nature of the individual's job or work environment so that it suits his or her needs, (b) to adopt the preferences and needs of the environment so that the individual is better suited to the nature of the job, (c) to leave the place of work or environment for a more congruent one, and (d) to remain in the same job (without attempting or after a failed attempt to alter oneself or the job) and suffer dissatisfaction and a greater risk of physical and mental illness. The first two possibilities are difficult if not impossible to implement, whereas the last two constitute concession and nonadjustment. Meir (1995) suggested more adaptive means of coping with a lack of occupational congruence, such as finding satisfaction in skill utilization, taking up a congruent avocation, or choosing a more congruent specialty within the occupational field. Our study suggests that a further strategy would be to create a more congruent work setting.

The findings of our study offer support for the importance of alternative types of congruence in general and work setting congruence in particular. WSC on its own was found to raise all the well-being variables, with OC adding little or nothing to the individual's sense of well-being in cases where WSC already exists. In view of the significance of this type of congruence, future studies would do well to develop the concept and identify additional elements of the work setting that may be included under this heading. Furthermore, it would be worthwhile to investigate different sorts of tenure (number of years in the occupation, in the job, or in the organization) and compare workers with high and low tenure (a comparison that could not be performed in this study because of the small number of respondents with few years of experience). The possibility exists that it is not necessarily the number of years of experience in the occupation that reduces well-being and generates the need for compensation in the form of a more suitable work setting but rather number of years in the same job or the same organization.

The practical significance of studies of the connection between different types of congruence and well-being lies in the fact that it is already possible to suggest new and effective means for coping with low or nonexistent congruence and with situations in which congruence no longer produces a sense of well-being. Alternative aspects of congruence have been found to be capable of compensating for a lack of occupational congruence, both reducing its damaging effects and increasing the individual's well-being. This has clear implications for employment counselors and career advisors. For example, the additive model can be of critical importance for individuals who are dissatisfied with their jobs and suffer from burnout and somatic complaints but for whom a career change is unfeasible. In such cases, the compensatory value of other types of congruence, such as WSC, becomes even greater.

This study indicates that an investment in the physical environment clearly pays off. Employees lacking (or very low on) occupational congruence can significantly improve their level of well-being and reduce their level of distress simply by achieving WSC while ignoring the issue of OC. Indeed, even workers who enjoy occupational congruence but who are low on well-being as a result of having been in the same occupation for a long time can improve their well-being and reduce their distress by the addition of work setting congruence.

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